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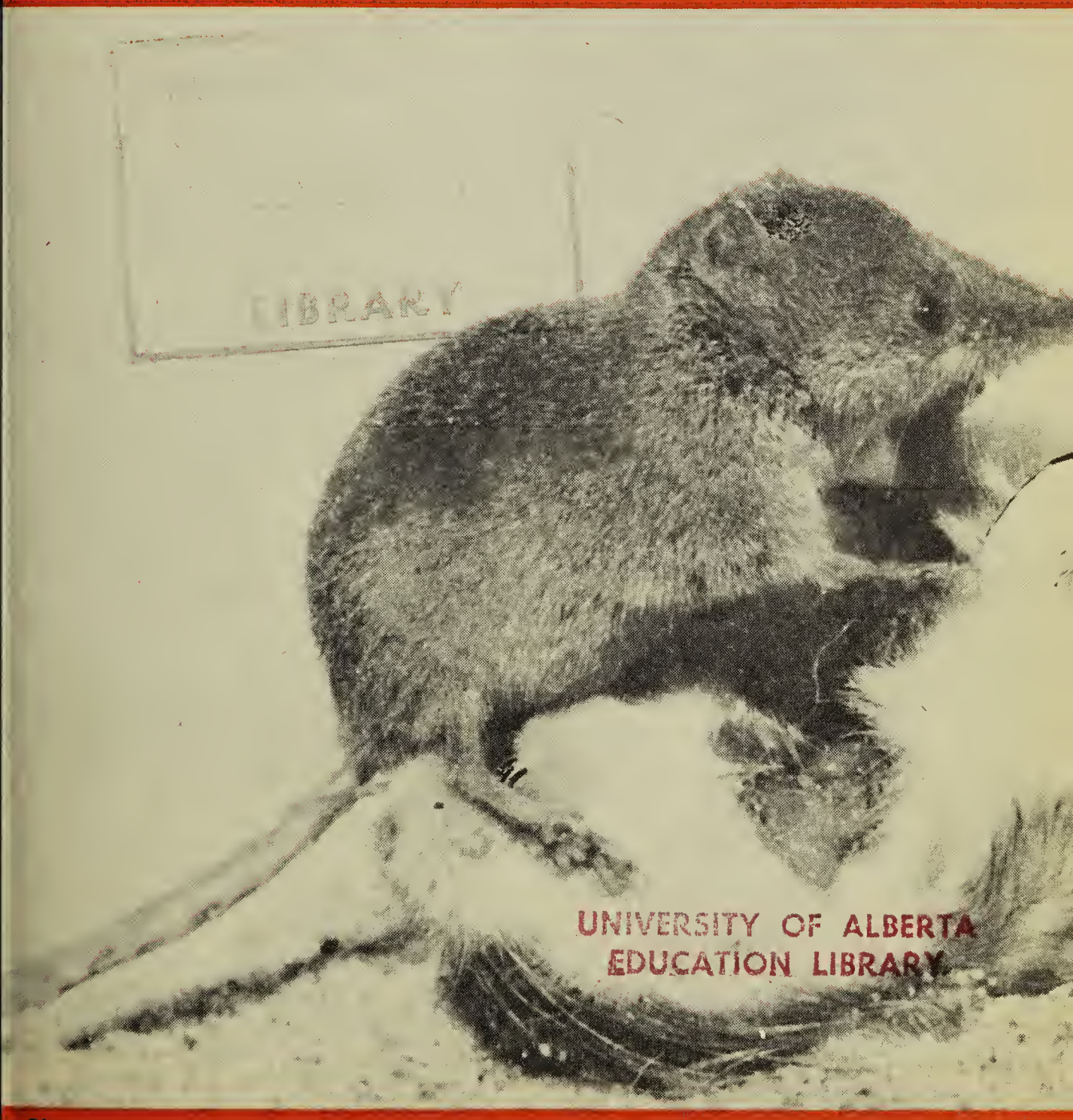
Blue Jay

XV, No. 3 September, 1957



n Shrew

Photo by R. W. Fyfe

Published Quarterly by
THE SASKATCHEWAN NATURAL HISTORY SOCIETY

Membership, including **Blue Jay**, one dollar yearly

BLUE JAY CHATTER

This summer I had the good fortune to meet several people especiall interested in natural history. Since I met them mostly because of m position as editor of the **Blue Jay,** I should like to introduce these new ac quaintances to you.

First there was Mr. Chapman, former editor of the excellent little mag azine **South Dakota Bird Notes.** Mr. Chapman came to our Summer Meetin from Sioux Falls, South Dakota. I had a pleasant hour of birding alon Pine Avenue on June 15 with him and his wife. It was stimulating, too, t have the encouragement and advice of an experienced editor. He made u feel proud of our founder, Mrs. I. M. Priestly, and of our magazine, whe he told us at our meeting that he was introduced to the **Blue Jay** in 19 when Dr. A. L. Rand suggested that the proposed South Dakota magazin be patterned after our publication.

Then there was Mrs. L. Stockelback of Verona, New Jersey, who w revisiting Canada this year to paint the floral emblems. Mrs. Stockelbac is also interested in birds and has written a book **Birds of Shakespeare** whi contains illustrations of the sixty birds mentioned by Shakespeare.

Dr. Peter Millman of the National Research Council was in Regina discu sing the part to be played in the International Geophysical Year by Regina ambitious group of amateur astronomers.

Dr. L. Murray and I spent one morning birding with him and visit Doug Gilroy's farm, where we watched the Burrowing Owl from Dou blind and saw the Lark Sparrow in his pasture.

While in Calgary recently I visited Dr. W. C. McCalla and spent t wonderful hours looking at flower specimens and photographs. It was rare pleasure to meet the man who collected across Canada in 1890. O willow **Salix macalliana** which was named for Dr. McCalla will n appear even more attractive to me. We have a lovely illustration of excellent photography in his picture of the Evening Star on page 131.

There were a lot of people at our Cypress Hills Summer Meeti and I should have liked to visit with all of them. Many came long distanc like the four school children from Paradise Hill who were brought by M and Mrs. Charles Prince. After meeting them, the thought came to us t the programme of our summer meetings should include special features young people, perhaps even a weekend camp for them at Emma Lake n June.

Among the Alberta people present, we should like to mention Kathle Hodges who brought us a copy of the first annual Alberta Bird Report (195 upon which the Edmonton and Calgary bird clubs are to be commend We have learned since the meeting that Miss Hodges has some beauti kodachromes, which we hope to see at some future gathering.

We are looking forward to reading an account of some birding done the Cypress Hills at our summer meeting, in the September-October is of **Canadian Nature.** Dr. H. Barnett, Toronto, came from a medical conv tion in Saskatoon and used his binoculars and camera to such good eff that he has been asked by **Canadian Nature** to tell about his experiences.

Now the summer is nearly over, but I'm looking forward to making more acquaintance. Mr. W. W. Mair, Chief of the Canadian Wildlife Serv is to be the guest speaker at the Annual Meeting. I know that you, too, looking forward to meeting him on October 16.

The Blue Jay

Published quarterly by the Saskatchewan Natural History Society

Founded in 1942 by Isabel M. Priestly

l. XV, No. 3 SEPTEMBER, 1957 Pages 93-140

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Membership — $1.00

Autumn

IN THE VALLEY OF THE ASSINIBOINE
By John E. Nixon, Wauchope

Not one false note in all the eye perceives,
No jarring contrast and no line untrue,
From that wide arch of opalescent blue
Down to the valley where the river weaves
Its winding course and in far distant cleaves
The lessening hills. This scene the Indian knew
In long dead autumns when October grew
Like multitudes of red and golden leaves.
Surely a spirit harbors in this place,
Haunting lost paths and hearthstones overthrown,
Making dim pasts to our tomorrows join —
Some lingering echo of that vanished race,
Too soon forgotten and too late unknown,
That whispers in the word Assiniboine.

Cranberry Hike

By RAY PETERSON, Tofield, Alberta

It was a grey, still day, with occasional bursts of sunlight smiling through the low clouds. Micheal and Colin trotted happily along beside us as Kathryn and I started off towards the muskegs. The third week in October is a bit late to pick cranberries, perhaps, but the notion had struck us and off we went.

The countryside, already stripped of its gay autumn colors, was clothed in warm browns and greys, trimmed here and there with the hardy greens of short, second-growth grasses, and the old-gold of a few remaining willow leaves. The water in a large slough we passed was a dark mirror blue-grey, cracked in the centre by the wake of a cruising muskrat. As we crunched through a long stretch of woodland, Kathryn scuffed a foot in the thick covering of fallen leaves. "It's like walking on a thick carpet of cornflakes," she said.

We ducked through a ring of tangled willows and entered a small muskeg. It was a pretty place with its humps of Labrador Tea, the small clumps of white birch saplin Clustered on small-leafed plants v the small, richly-red fruit of the L Ground Cranberry. It was lur time. We perched on mounds holstered with spagnum moss, a ate the sandwiches we had broug How few they seemed, and how g they tasted, especially the che ones garnished with a liberal spri ling of the tangy, juicy cranberr

After picking a few quarts of small, bright berries, we crossed a larger muskeg. Here we found larger fruit of the Swamp or L Cranberry. Its fruit, often mott and speckled before fully ripe, h the ground on fine threads and gr in assorted shapes, spherical, oblo and pendant-shaped.

Scattered over the muskeg w great quantities of dried mushroo too brown and shrivelled to be ide ified. Large clumps of grey lic dotted the muskeg. Here too, w a few clusters of tiny, dark-gr lichen that poked up in slen pointed miniature fingers that loo

ke a phalanx of miniature spears. nother lichen that attracted us was light-green wonder of beauty with se-like tips of crimson.

I tossed a large, round clump of ey-green lichen to Kathryn. Here," I suggested, "A hat."

"To go to the Ladies Meeting ith," Micheal put in quickly.

The afternoon passed very quickly, d all too soon it was time to leave.

A small flock of Mallards rose into the air from near the dark pyramid of a muskrat house. As we neared home, a Blue Jay scolded from the row of dead sunflowers along the garden. And then, catching our instant attention, a small, plump bird with rose-flushed underparts and a striking grey patch on its head, hopped atop a rail fence. It was a Grey-crowned Rosy Finch.

It had been a pleasant hike, and to help us remember it we would have a few jars of spicy cranberry jelly.

Rhapsody in June

By ELIZABETH CRUICKSHANK, Regina

The choice of the most spectacular gment of the province, the Cypress lls, for the summer meeting of the N.H.S. was a happy one. Rain had ven a fresh-washed smell of forest d rich earth to make heady atmos- ere for the motorcades that con- rged on the park.

From the crisp hour of dawn rders and botanists were abroad on yages of discovery. A Maryland llow-throat set the mood at that rly hour, a melodic mood that was accompany us through the whole sit — "witchery, witchery, wit- ery".

Pink-sided juncos were numerous, one mother leading us to her nest in a grass-curtained hollow in the roadside. A red-breasted nuthatch disclosed his home too, a tiny hollow in the tree trunk beside Mr. Budd's cabin. Over a meadow we followed an ovenbird who called "teacher, teacher, teacher" to friends so glad to see her.

An exhilarating argument about the identification of a plain little warbler must have made it feel like a prima donna, as it sang and bowed on its tree-top stage before the crowd of dedicated birders. Being a Rocky Mountain orange-crowned warbler— its crown not on display — it was quite at home in the aspen forest.

A thrilling experience was sighting a lazuli bunting, a Blue Boy picture framed in spruce wood with a cathedral of pines for a background.

On the deep sponge of humus on the forest floor we found orchids not named for their odd and beautiful blossoms but for their odd-shaped roots, — coral root. Some had spotted blossoms, others striped, but all stood in groups, their purple-madder thick stems conspicuous in the subdued light.

Shining arnica reflected the sun that found its way among the pines to make little pools of light on the burnt-orange pine needle carpet.

From the edge of the road leopard frogs hopped out of our way to the brook that trilled happily as it tumbled in and out of willow and rose

shrubbery on its way to feed Loch Leven.

Although we had begun the morning in definite groups, we found ourselves by noon all mixed up, some of us even lost. But all had made new and exciting friends. The dining hall was full of excited voices: "Rose-pink pussy-toes"; "Bishop's Cap took me back to Ontario"; "Indian paint brush and larkspur" and so on and on. We had considered the lilies of the field and found them satisfyingly lovely. And the bird check lists were discussed, exchanged, argued and gloated over!

The park offered too many features to cover in one weekend. So, some members visited the nesting site of the trumpeter swans; some drove to Bald Butte; some had a stirring ride in a jeep with the fire warden to see Hidden Valley, Lonepine Creek and glorious blue hills in the distance.

The spirit of the open range was symbolized for all of us on the drive to Cypress Lake when we heard the musical, clear, carefree and prolonged call of the long-billed curlew. As it landed within our sight we wondered if it, with other large beautiful birds, would just remain in our memories, its call to become the strange sad cry of a bird nearing extinction? To complete the picture antelope cantered free and fearless along the valley floor.

In a tiny lake, Wilson's phalarope swam in dizzy circles: clockwise then counter-clockwise. To vary their activity and menu they ran along the shore catching flies, a difficult procedure with their long narrow bills. We have seen great blue herons, too, expertly hawking insects though their long sabre bills seem poorly adapted for fly-catching.

In the evening, naturlists forgot the heat and backless benches in the crowded hall as they plied Bruce McCorquodale with questions after his engrossing address on the fossil mammals of Cypress Hills.

Coffee time allowed exchange of experiences and formulating of plans for sunrise excursions in this exceptional area.

Friends new and old said good-by with the hope of meeting again next year at Emma Lake. Mr. Herman Chapman, our distinguished visitor, said he was keeping a list of friends instead of birds on this trip. It was such a pleasure to have him with us from South Dakota.

We had two regrets — one that all the members of the S.N.H.S. could not have been there to share the wonders of the park, and the memories; and the other that there was no time to get together in workshop sessions to discuss our new finds.

It was not just the birds and plants and pictures, nor the amazing plan but the generous help of the museum directors and their staff, of the expert leaders in their different fields, and of the committee members from Skull Creek and Regina who had thought of everything, the patience and consideration of the park superintendent and his staff — not any one of these things but all combined made the safari to Cypress Hills an idyl long to be cherished.

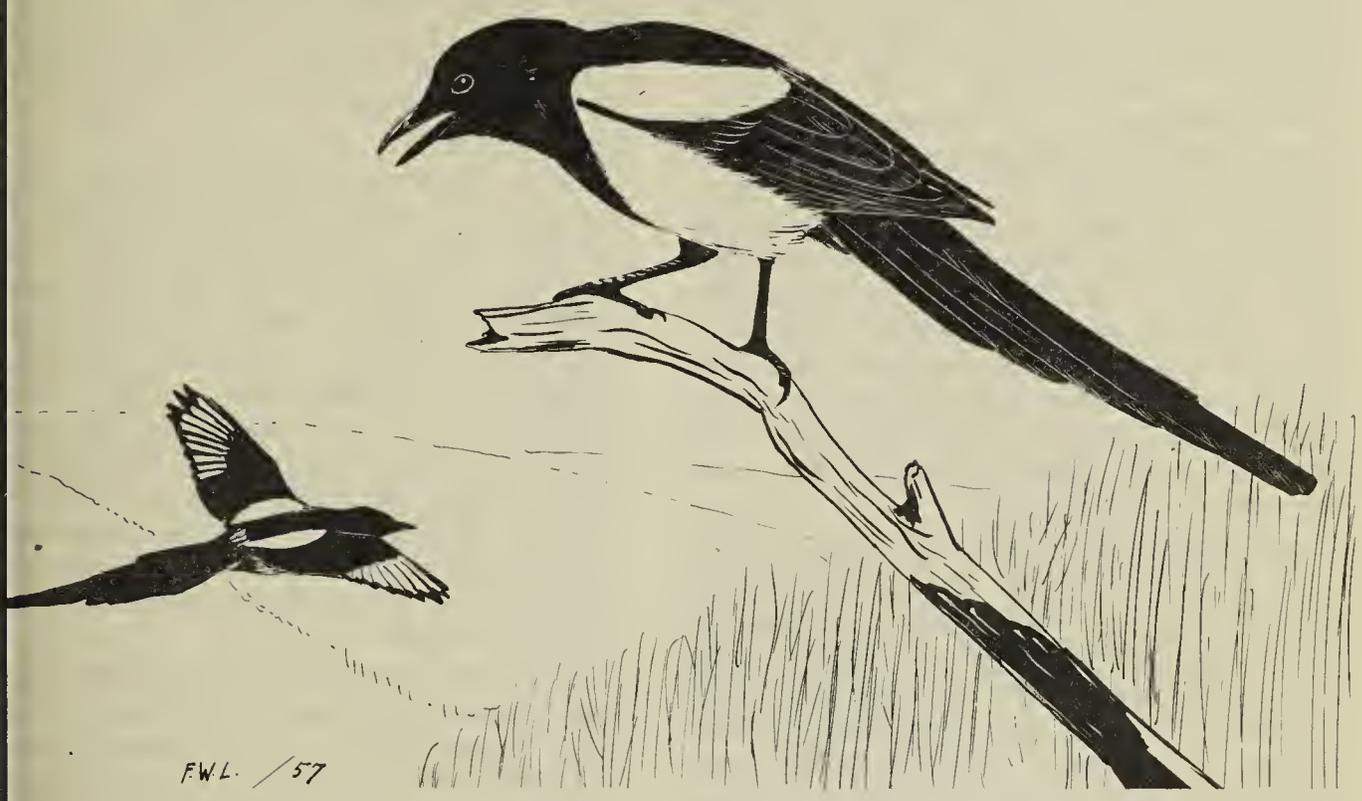
Rupert Brooke knew how each of us felt:

Still may Time hold some golden space
Where I'll unpack that scented store
Of song and flower and sky and face
And count and touch and turn them o'er.

The Wily Magpie

By MARION NIXON, Wauchope

Reprinted by permission from the *Farmer and Stockman,* May 14. 1957



As I write, I can see the jumbled k of twigs, high in one of our est poplars, constructed by a pair magpies. It is built in the last tch that would be firm enough support its weight, between three n boughs that reach in unison ward the sun. Now it sits like a ggy ball between ourselves and blue of the sky beyond the tree-, but the leaves will give it some een from view before the young ds hatch.

Right now, from one angle, I can k straight through the ball of gs, from front door through the k escape. The roof of the nest ess densely interwoven than the ual platform on which the eggs laid, but only in this one direc- n can I see unimpeded light ight through. The whole nest is least three feet in height, and over feet in diameter, past the sup- ting branches.

While it was being built, I heard ch magpie racket in the shelter- t, as though the pair did nothing argue where and how it should done. Now, I seldom hear a awk from either of them, and n only far away from the nesting . They take care not to draw any ice to themselves near it.

Ordinarily, they are noisy birds, ping up a continuous chatter in hoarse gutteral, raucous croakings, or a sort of plaintive and rasping squeak with a lift at its end. This they sometimes repeat over and over till it gets on one's nerves. I think it is most used when there are young, and may be a note of warning or instruction to them.

But while eggs are brooding, or if one is intent on mischief, the magpie is as silent as a wraith. Then it will lurk behind any cover that offers, slipping between bluffs in a swift and sinuous flight till it can dart down upon its prey; and away in an instant.

The magpie is a handsome scalawag, in its slim lines and bold contrast of jet black and milk white coloring. Its long tail adds a deceptive impression of size, which one has to remember when trying to shoot the bird. Its flight is distinctive as it proceeds through the air on one level, with no dips and rises or heavy flapping of wings. This is not to say that it does not dodge, but it prefers to dodge behind the cover of the bluff, to throw a pursuer off its trail.

It has plenty of wily tricks to help it in an escape. I have shot at a perched magpie in the trees, sure I had hit it because it tumbled straight down; a few minutes later it could be seen strutting about the pasture

a couple of hunderd yards away, and soon came back into the shelterbelt. A later shot triggered the same tactics on its part, but that time I saw the bird drop . . . down to almost ground level, where it suddenly veered at right angles and slid away between a corridor of trees.

We always try to discourage them from nesting nearby, for they are death to fledgling birds, and destructive of eggs of our nesting songbirds. In the Old Country magpies are said to attack sheep, sitting on their backs and pecking at any open sore; they are even accused of opening new wounds that allow them to pierce the sheep's kidneys and thus cause loss in farm flocks. We have no proof of that here.

We do know that a pair of magpies came, turn about, for just on one mile, to carry off baby chicks for their young to feast on. They were the most silent pair of magpies imaginable, while on their nefarious errand, but what a squalling pair after the nest was located and destroyed!

We often wonder if the drop in nighthawk population is directly due to the increase in magpies. The nighthawk eggs, laid in such exposed locations as they are, must have been easy pray. I have seen more nighthawks, of late years, inside cities or in towns than out in rural areas.

I sometimes think that magpies get a lot of sport from their eluding of a pursuer, in any way they can make a fool of him. It would almost seem they have a sense of humour. I remember one winter morning watching a magpie lead our half-grown pup a merry chase.

There were three bits of offal in the yard, that the pup had haule to worry and feed upon. The magpi would light on one, to get his shar of the meal. The pup would charge and the magpie would flip over t the second piece of meat, whereupo the pup would charge again. The the magpie flew to the third piec and so it continued round and roun the triangle.

The poor puppy would stalk h tormenter, creeping up till he wa within easy leap of the bird steal ing his tid-bit. But when he leap the darn thing was already sittin on the next one. The pup would s down on his tail and study the si uation . . . the magpie meanwhi with a beady eye cocked his way . frustrated yippings had no effect all on the bird . . . so the pup wou not be able to resist just one mo attempt to beat that miserable bir He never did.

Until the poplar bluffs grew acro our landscape, we never saw a mag pie. Apparently they have gradu ally spread eastward from the Roc ies, though their population has flu tuated over a long period of time.

Naturalists who travelled t prairie provinces around the turn the century found it only west of t Great Lakes, and only rarely Manitoba. Taverner describes it occurring from Middle Yukon to Ne Mexico; in Canada, common on t southern prairie, in the bluffy cou try adjacent, and in the southe B.C. except the coast district; e ratically north and eastward.

The magpie is common all ov Europe, and northern Asia, but t Old Country bird has a differe manner of calling to our Americ sub-species, although their pluma pattern is almost the same.

Seen By a Seer

By BOSWELL BELCHER, Dilke

Here I am again — this time to report the "seeing" of a bird rarely seen in Saskatchewan. We were going for one of the Sunday drives we frequently take. My mother and dad enjoy these outings for the drive, my sister Margaret is an enthusiastic bird watcher and observer of wild flowers so enjoys them also, and find myself going along to drive t car and see how the neighbors ne and far are getting along with th farming.

It was mid-afternoon, June 2, 19 and we had just started down road leaving the farm I noticed a b

ith the general appearance and ctions of a thrasher fly down to the round and back up on the fence long the pasture. As we got closer saw that it had color markings mewhat similar to a shrike and called back to the bird watcher, What have we here?" "A shrike", he said seeing the color, but on oticing the thrasher-like form and ight her interest was aroused as nly that of a bird watcher can be. he bird flew into a clump of willows ong the fence. We got out and ent over, but it appeared to be a y bird and quickly flew over to a earby bluff. We went into the past- re and drove toward the bluff, but efore we could get out of the car e bird had moved to another bluff. argaret suspected it might be a ockingbird (and hoped it would e) but also thought it could be a ownsend's Solitaire. Out came the rd book for a study of fieldmarks efore we continued the chase. But as we lost the bird at the next bluff d had to be content to continue r drive ending with a picnic supper ong a prairie trail near the Arm alley. Before we left the pasture e saw a Great Horned Owl and und its downy young in a nest in hich I had banded Swainson's awks for Stuart Houston one year.

As we returned home to do the ening chores we were quite sur- ized to spot the same bird we had llowed earlier and along the same fence. This time it proved much more co-operative, and as Margaret and I got out to get a better view it moved up and down the fence and finally into the willow clump where it stayed while we approached — one on each side. Here it stayed and tried to hide among the branches and leaves while we fought off great hordes of mosquitoes and observed it at a distance of not over ten feet for some fifteen minutes. Those minutes seemed like hours as at times the mosquitoes almost make you yell, but there was no way to get out of it — a bird watcher will go through anything to establish beyond the shadow of a doubt the definite and accurate identity of a new species, and I had to go along! We established to our satisfaction that this grey and white thrasher-like bird with the white on wings and tail (but no black mask like the shrike's) was a Mockingbird.

No "seers", I haven't become a "watcher" even though I did get up early and tag along with the watchers at Cypress Hills. I had no luck there even of "seeing" some of the new species of small birds the watchers were finding. However, when looking over the countryside on the way out to Cypress Lake I did see some Sage Grouse which I think escaped many of the watchers. We also saw some fine scenery, and it will be some time before I forget the view from Bald Butte.

EMINISCENCES OF NIPAWIN'S NOTED ORNITHOLOGIST

Strictly for the Birds

ITOR'S NOTE: Last summer Mr. Wright interviewed Maurice Street, a friend of his of g standing who took an interest in him when he was going to high school in Nipawin, and ouraged him to become a bird watcher and bander. We are pleased to publish Mr. Wright's ort of the interview because of the encouragement it will give all aspiring birdmen.

"STRICTLY FOR THE BIRDS" is expression that usually carries rtain insulting implications. But it s a very different and appropriate eaning for Maurice Street of Nip- in. Mr. Street is a slim, balding an with warm eyes and a contag- us laugh who obviously enjoys life d is accepted as one of Saskat- ewan's top ornithologists. He's trictly for the birds" and the birds e strictly for him!

How did this remarkable bird watcher and bander get his start? Here are his own words. "Well, in 1922 I got my first bird book. It was Chapman's **Land Birds East of the Rockies.** And at that time Mr. Lawrence of Winnipeg had started his **Chickadee Notes** (Winnipeg Free Press), and I began reading. I was twelve years old. I was on the farm at that time and then I moved into town (Tisdale) and I got acquainted

with Mr. Van Blaricom. I borrowed his field glasses and he showed me a a few of his bird books and made things a little more interesting for me."

What sort of bird watching was the young ornithologist doing? "When you're starting out from scratch that way you've just got to puzzle out every bird you see, because there's no one out there to tell you. You just find these things out for yourself. You see a bird and you don't know what it is and you start looking in the bird book for it and finally you find it. And you get more proficient as you go along." Mr. Van Blaricom put up a prize for the best migration list compiled by a Tisdale youngster and young Maurice took the prize several times. He had been keeping careful records before this, however. Were there any birds in those days that our ornithologist doesn't see now? "No. We see birds now that we didn't see in those days."

How does a young fellow get started watching birds? "Being on the farm more or less isolated, my interest was drawn to birds. One highlight I remember after I met Van Blaricom: I saw a Lewis Woodpecker. It was about '26, I guess. It wasn't even in Chapman, because it was a western bird. And I happened to meet Van Blaricom and he was telling me about having seen the bird too. He didn't know what it was either. We went down to his place and looked through all his bird books and we finally found it."

What are some of the most interesting "finds" in the Street bird list? "A very recent one was a Whip-poor-will. Roy Lanz and I found the nest. We took pictures of it and I wrote an article about the whole deal for **The Blue Jay.** And then I remember the Indigo Bunting I saw near Armley in 1926. And the black-headed Grosbeak I saw down on the river flat near Tisdale . . . it's a southern bird."

The conversation turned to Nipawin days. "Nipawin is one of the greatest places in the province for a wide variety of warblers. It's right on the dividing line between the coniferous and transition zones, and we have all types of timber here and we also have swamps and lakes. This is one of the most southern places where suitable nesting habitat is available for warblers. The only place the Chestnut-sided Warbler nests here is within sight of the Saskatchewan river. And that goes for the Canada Warbler, too. There must be twenty species of warblers that we see here."

Sparrows abound hereabouts, too. "Our main nesting sparrow that you don't get nesting further south is the White-throat. And we have the Lincoln nesting here, the Clay-coloured, the Chipping and the Leconte's. As far as nesting is concerned, I haven't got too many to find now. Once you find one or two there's no point in going on finding nests unless you're weighing the eggs." Nipawin has fifteen species of sparrows!

"I started banding in 1945. Stuart Houston got me interested in that, and I've banded . . . somewhat over ten thousand birds since 1945. Which is not too many. One thing I'm quite proud of is the fact that I got Billy Matthews interested in it, and at the present time I think he's one of the sharpest birdmen in the province. He has a keen pair of eyes, and not only that, he was a student who had enough initiative to do things for himself and find out things for himself."

The conversation turned to Mr. Street's own personal methods of bird watching. One question that arose was how much a bird call had to do with bird identification. "On the warblers—I don't have to see them any more. I know them by voice." Knowing bird calls comes "only through experience." Do bird book descriptions of bird calls give any help at all? "No, none what ever."

What equipment should the young bird watcher have? "Well, the first thing that I'd recommend getting is Peterson's **A Field Guide to the Birds.** I wish now that I'd had one of those when I was young. It doesn't matter where you are—there are birds everywhere, and if you see a bird you've just got to go to hunt until you can identify it." Bird watchers should be keeping regular bird lists. "Every time they go for a walk they should record what they see. Lots of times in my younger days when I was learning these things, I'd see a bird when I was out and wouldn't know what it was, but even if I didn't write down a description of it I would make a mental note of what

t looked like. Sometimes with some f these rarer birds I wasn't sure until years later."

How does this top-flight Saskatchewan ornithologist go about identifying a bird in the field? "I think ne of the first things to have noticed s the way the bird flew, and if it lid alight on a branch, its posture. Birds are quite different in flight. You can pretty well tell the difference between warblers and kinglets, or instance, just in their flight. If he bird was a small bird and the ead appeared large, I'd think first hat it would have been a vireo. If he bird was slim and held its body orizontal to the branch I'd say it was a warbler. And if it sat quite traight I'd say it was a flycatcher. Then the colour pattern. The first hing I'd look for would be the wing ars. About half of the birds have hem and half of them haven't. Then he colour. And the song, as I have nentioned."

What about good power binoculars for bird watching? "Yes, but not too strong a binocular. I think about a 6x50 or 8x50 is plenty strong enough. Small-power glasses have a large field of vision and you don't have to hold them as steady, and with birds it's hard to get them in focus with the more powerful glass."

In summing up, Maurice pointed out an old truth about bird watching and every other form of nature study: "If you like watching birds, it doesn't matter where you go or what time of day it is, or whether it's raining or the sun is shining . . . there's always something of interest."

Thirty-four years of "something of interest" have made Maurice Street a leader in his field, and a man richly deserving of the reputation of one of Saskatchewan's top ornithologists!

BIRD NOTES

More Starling Records

Wm. Niven reports that the first tarlings were seen at **SHEHO**, Sask. April 16, 1944. Although they arrive arly in the spring (sometimes even head of Crows) and leave late in all, Mr. Niven believes they are not ear-round residents. Never numerous, the Starlings have decreased n the last few years. For several ears, large flocks gathered in the all—500 or 600; but in the last few ears, fall flocks have been small. irst seen dates: April 16, 1944; March 18, 1945; March 15, 1946; March 24, 1947; March 27, 1948; March 31, 1949; April 5, 1950; April , 1951; March 30, 1952; April 6, 1953; April 5, 1954, March 31, 1955; April , 1956; March 16, 1957.

Mrs. J. Hubbard, GRENFELL, saw he first Starling in their district April 3, 1943 near the town of Grenfell. Small flocks were seen in Grenfell summer and winter for several years after their first appearance. Then, after an interval of a few years with no Starlings, 4-6 were seen March 9, 1957 at a garbage dump along No. 47 Highway near Grenfell.

Miss E. Barker, Regina, has records of Starlings at **MILESTONE** (May-June, 1945), at **LORLIE** (flock of ca. 15 seen June-Oct., 1945, and described to her as wintering 1944-5), at **GIBBS** (where she came into possession of a female bird Dec. 31, 1948 which is now in her collection of mounted birds), and at **REGINA** (1949-1956). Interesting Regina dates Feb. 13, 1955, Dec. 12 1955, Dec., 1956 suggest wintering birds.

Mrs. Clem Osborne reports that Starlings have nested at **WROXTON,** Sask. every year since she moved there in 1951. Every spring, two, four or six birds nest in holes (probably made by woodpeckers) in the overhanging roof. Early spring arrival dates: March 27, 1953; April 5, 1954; March 30, 1955; March 22, 1956; March 25, 1957.

Dora Bardal has seen Starlings only twice at **WYNYARD:** a small flock several years ago, probably passing through; and a single bird on March 31, 1957, with a flock of grosbeaks.

Henry McArton reports a Starling nesting in a hole drilled earlier this spring by a flicker in the wall of a recently vacated house on his farm at **DILKE**, Sask. The Starling took up residence in the cavity between the walls. Three young were raised and two of them, just able to fly, were scared out into a butterfly net held across the opening and banded by Stuart Houston on July 10, 1957.

Other records have gone directly to M. T. Myres who will summarize all material received from Saskatchewan for a later issue of the **BLUE JAY.**

May Bird Count Made by Saskatoon Natural History Society

Sunday, May 26, 1957. Area lying within circle centred approximately 2 miles south of Saskatoon—with a radius of 7½ miles—Including the airport, Forestry Farm, both banks of the South Saskatchewan River, the city, three golf courses, the banks of Beaver Creek for one mile, adjoining fields and pasture. 24 observers in 4 parties. Total party hours, 34 (from 6:30 a.m. to 8:00 p.m.); total miles by car, 85; total miles on foot,13½. Morning sunny, no wind, maximum temp. 65°, occasional light showers in the afternoon.

Horned Grebe, 26; Eared Grebe, 4; Western Grebe, 4; Pied-billed Grebe, 1; American Bittern, 1 (Bremner); Mallard, 120; Gadwall, 2; Baldpate, 55; Pintail, 61; Shoveller, 59; Green-winged Teal, 3; Blue- winged Teal, 97; Redhead Duck, 4; Canvas-back, 6; Lesser Scaup, 79; Sharp-shinned Hawk, 3; Red-tailed Hawk, 4; Marsh Harrier, 6; Sparrow Hawk, 1; Sharp-tailed Grouse, 2; Hungarian Partridge, 2; Ring-necked Pheasant, 5; Sora Rail, 2; Coot, 24; Semipalmated Plover, 2 (Bremner); Killdeer, 25; Golden Plover, 51; Black-bellied Plover, 31; Upland Plover, 1 (Gollop); Ruddy Turnstone, 1 (Bremner); Long-billed Curlew, 1 (Hogg); Willet, 2; Lesser Yellow-legs, 33; Spotted Sandpiper, 12; Pectoral Sandpiper, 14; White-rumped Sandpiper, 25; Baird's Sandpiper, 12; Least Sandpiper, 24; Marbled Godwit, 3; Wilson's Phalarope, 25; Northern Phalarope, 20 (Mann); California Gull, 2 (Gerrard); Ring-billed Gull, 1 (Gollop) . . . at least 22 other large white gulls noted, but identity not positive . . . ; Franklin's Gull, 2; Common Tern, 4; Black Tern, 98; Mourning Dove, 30; Nighthawk, 3; Belted Kingfisher, 2; Flicker, 11; Hairy Woodpecker, 5; Downy Woodpecker, 2; Eastern Kingbird, 30; Arkansas Kingbird 1 (Gollop); Eastern Phoebe, 2; Say's Phoebe, 3; Least Flycatcher, 12; Horned Lark, 5; Tree Swallow, 27; Bank Swallow, 12; Barn Swallow, 15; Cliff Swallow, 12; Magpie, 18; Crow, 57; Black-capped Chickadee, 1; House Wren, 16; Catbird, 1; Brown Thrasher, 18; Eastern Robin, 72; Olive-backed Thrush, 1 (Hogg); Veery, 4; Mountain Bluebird, 4; Cedar Waxwing, 2; Loggerhead Shrike, 4; Starling, 15; Red-eyed Vireo, 7; Warbling Vireo 2; Tennessee Warbler, 3; Orange-crowned Warbler, 4 (Hogg); Yellow Warbler, 51; Myrtle Warbler, 1; Black-poll Warbler, 1(Roy); Redstart, 1 (Hogg); English Sparrow, 530; Meadowlark, 68; Yellow-headed Blackbird, 15; Red-winged Blackbird, 120; Rusty Blackbird, 5 (Gerrard); Brewer's Blackbird, 60; Baltimore Oriole, 10; Bronzed Grackle, 25; Cowbird, 77; Cardinal, 1 (Morris, Mills, Grady, Gerrity, Roy); Rose-breasted Grosbeak, 4; Goldfinch, 5; Spotted Towhee, 10; Savannah Sparrow, 10; Vesper Sparrow, 75; Chipping Sparrow, 19; Clay-colored Sparrow, 131; Swamp Sparrow, 1 (Wedge, Gerrard); Song Sparrow, 31; Lapland Longspur, 71. Total species, 104; total individuals, 2,703.

Observers: **Dr. J. W. Gerrard, Mrs. Gerrard, J. Gerrard, P. Gerrard, Ted Wedge, Mrs. Wedge, Terry Wedge, Miss D. Gould, Mr. C. Scarfe, Mr. J. Hogg, Mrs. G. Hogg, Mr. J. Shadick, Miss H. Mann, Miss B. Long, Mr. R. Gollop, Mrs. Gollop, Dr. R. Bremner, Mrs. Bremner, Miss T. Conway, Miss I. Shaw, Mr. R. Pravda, Mr. A. Grady, Mr. R. Gerrity, Mr. R. Morris, Bob Mills, Frank Roy** (recorder).

Record of Cardinal at Saskatoon, May 26, 1957

The big thrill of the May bird count at Saskatoon was the spotting of a Cardinal. I was leading a group doing a routine count of the river bank and the adjoining grounds of the Sanatorium when we heard a loud, melodious call completely foreign to all of us. The song was coming from the lower branches of a big spruce on the grounds of the Sanatorium, just a few yards from the main door. Suddenly we saw a brilliant patch of red, a crested head and we knew that we were viewing a Cardinal many hundreds of miles out of its normal range. We followed the brilliant male bird as it flew across the lawn to a small, brush ravine adjoining the grounds. It sang and whistled for half an hour while we tried to get close enough to photograph it, but we had no luck. Finally it disappeared in the bushes. It was not seen or heard again, although several return trips were made to the area. Five observers had good view of the bird through 7x binoculars, at distances of 25 to 40 yards. The

observers were **Ross Gerrity, Arthur Grady, Ralph Morris, Bob Mills** (public school and collegiate students) and myself. **Frank Roy**, Saskatoon.

Myrtle Warblers at Spirit Lake

Joyce Gunn reports two pair of Myrtle Warblers nesting at Spirit Lake. The first pair had two young leave their nest in a spruce tree at her back door, June 18, 1957; the second pair were seen with one young Myrtle and a cowbird about a week later. Although the Myrtle was not listed as a resident by C. S. Houston, **Birds of the Yorkton Area,** we have Miss Gunn's report of one pair nesting at Spirit Lake last year (**Blue Jay**, vol. XIV: 88).

Cliff Swallows Use Barn Swallow's Nest

Joyce Gunn, Spirit Lake, writes: "On the outside of the barn we had Barn Swallows nesting for two years . . . This year the nest was taken over by a pair of Cliff Swallows. They merely used the old nest as a foundation and then built their nest on up to the roof. The young have not hatched yet (July 10, 1957)." In southern Saskatchewan the favourite nesting site of Cliff Swallows seem to be the undersides of concrete bridges. However, as Bent points out, the Cliff Swallow is an adaptable species and in the eastern part of its range has become sufficiently associated with the eaves of houses and barnes to merit the name "eaves swallow". This report of a single nest is interesting because "Cliff Swallows are gregarious in their nesting habits, and it is exceptional to find isolated nests far distant from others of the species" (A. C. Bent. 1942. **Life Histories of North American Flycatchers, Larks, Swallows, and their Allies**).

Colour-Marked Mallards

On May 4, 1957 **Gwilym Jones,** Findlater, Sask. observed a pink-winged Mallard drake with brown female fly up from a slough on the S.W. ¼, 28, 21, 24, W2nd. This was presumably a Mallard colour-marked by the Illinois Nat. Hist. Soc. (See **Blue Jay**, XV:8). Dr. Fred Glover (U.S.A. Fish and Wildlife Service) had two Mallards (one green-winged, one pink-winged) reported to him as seen at Mossbank.

Brown Thrasher's Nest with Venetian Blinds

A Brown Thrasher's nest with six young in it was shown to me June 10, 1957 by **H. S. McArton** on his farm at Dilke. The nest was shielded on the east by the sloping slab of a wooden slab fence and on the west by an adjustable combine sieve leaning against the fence, shading the nest as Venetian blinds would! Hoe drill drag bars, also leaning against the fence, provided the crotch in which the nest was built. M. Belcher, Regina.

Cinnamon Teal at Regina, May 27, 1957

A male Cinnamon Teal was observed on a slough near Rowatt on May 27, 1957 by **Elmer L. Fox** and **Frank Brazier.** It was seen again the following day by G. F. Ledingham. Elmer Fox also has a record for May 3, 1956 of a single male Cinnamon Teal observed on a slough near Richardson.

A Flash From the Wascana Waterfowl Park re: Goose Project

On July 29, 1957 Fred Bard reported the one-hundred mark having been reached in the goose population in the Wascana Waterfowl Park, with 36 adults and 64 young. Success of the hatch this year is credited chiefly to the portable incubator used for hatching eggs brought in from the Cypress Hills and removed from the first settings of the park geese. Eight of the nine pairs from which the first clutches were removed re-nested.

CO-OPERATIVE SPRIN

	BLADWORTH P. Lawrence Beckie	DILKE J. Boswell Belcher	FORT SAN E. M. Callin	GRENFELL Mrs. J. Hubbard	LEROSS Mrs. Mary F. Brennan	MENNON Robert Buhr	NAICAM W. Yanchinski
Whistling Swan	Ap. 6	Ap. 17	Ap. 6	Ap. 30	My. 8	Ap. 18	—
Canada Goose	Ap. 9	Ap. 16	Mr. 21	Mr. 30	Ap. 29	Ap. 19	Ap. 14
Mallard	Mr. 31	Ap. 17	Ap. 7	Ap. 5	Ap. 4	Ap. 6	Ap. 20
Pintail	Ap. 13	Ap. 4	Ap. 5	Ap. 5	Ap. 10	Ap. 17	Ap. 21
Marsh Hawk	Mr. 31	Mr. 29	Mr. 31	Mr. 27	Ap. 12	Ap. 11	My. 1
Killdeer	Ap. 14	Ap. 16	Ap. 5	Ap. 17	Ap. 14	Ap. 21	Ap. 15
Wilson's Snipe	Ap. 22	—	My. 5	My. 14	—	My. 2	Ap. 26
Mourning Dove	My 11	My. 10	Ap. 22	Jn. 3	My. 9	—	My. 12
Nighthawk	—	—	My. 26	My. 30	—	My. 28	—
Ruby-thr Hummingbird	—	—	My. 25	—	Jn. 15	—	Jn. 1
Flicker	Ap. 25	Ap. 20	Ap. 22	Ap. 22	Ap. 22	Ap. 24	My. 2
Eastern Kingbird	My. 24	My 22	My. 24	My. 25	My. 24	My. 27	My. 23
Eastern Phoebe	—	—	Ap. 27	—	—	—	Ap. 26
Barn Swallow	My. 8	My. 8	My. 2	My. 12	My. 11	My. 18	My. 9
Purple Martin	My. 27	—	—	—	—	—	—
Crow	Mr. 21	Mr. 21	My. 24	Mr. 24	Mr. 20	Mr. 30	Mr. 18
House Wren	My. 29	Jn. 2	My. 3	My. 20	Jn. 1	Jn. 14	My. 8
Catbird	My. 30	—	My. 25	My. 26	Jn. 1	Jn. 13	Jn. 2
Brown Thrasher	My. 9	My. 5	My. 4	My. 13	My. 31	My. 17	—
Red-eyed Vireo	—	—	My. 26	—	—	—	My. 6
Black and White Warbler	—	—	My. 19	—	—	—	—
Yellow Warbler	My. 13	My. 14	My. 12	My. 23	My. 24	Jn. 3	Jn. 8
Myrtle Warbler	My. 3	My. 6	My. 2	—	—	—	My. 15
Ovenbird	—	—	My. 26	—	—	—	—
Redstart	—	—	My. 28	—	—	—	—
Red-winged Blackbird	Ap. 5	Ap. 3	Ap. 5	Ap. 5	My. 27	Ap. 24	My. 3
Baltimore Oriole	My. 22	My. 24	My. 14	My. 25	My. 24	My. 27	Jn. 6
Rose-breasted Grosbeak	—	—	My. 14	—	—	My. 15	—
Goldfinch	My. 23	My. 27	My. 11	My. 26	Jn. 1	My. 27	My. 29
Slate-colored Junco	Ap. 8	Ap. 21	Mr. 30	Mr. 22	Mr. 30	Ap. 5	Ap. 9
Chipping Sparrow	My. 24	My. 29	My. 4	My. 9	My. 18	My. 13	—
White-Crowned Sparrow	My. 9	My. 5	My. 7	My. 4	My. 10	My. 12	—
White-throated Sparrow	My. 12	My. 14	My. 10	Ap. 27	My. 4	My. 3	My. 12

RATION STUDY, 1957

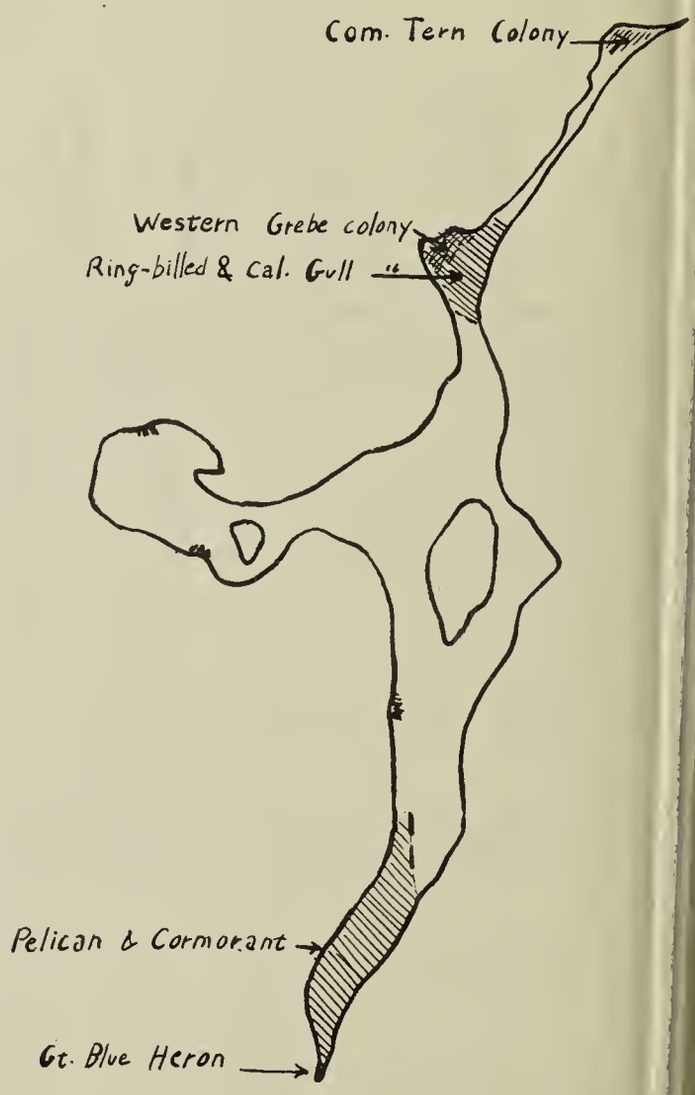
Compiled by Mary Houston, Yorkton.

REGINA Frank Brazier	SASKATOON R. M. Bremner	SHEHO Wm. Niven	SPIRIT LAKE Joyce Gunn	SPIRIT LAKE Bill Anaka	TORCH RIVER C. Stuart Francis	TULLIS Mrs. E. C. Boon	WYNYARD Dora Bardal	YORKTON Stuart Houston	OAK LAKE, MANITOBA David Hatch
Ap. 20	Ap. 22	Ap. 24	Ap. 21	Ap. 21	—	Ap. 16	—	Ap. 21	Ap. 5
Ap. 21	My. 5	Mr. 25	Ap. 14	Ap. 17	Ap. 21	Ap. 16	Ap. 5	Mr. 21	Mr. 21
Ap. 6	Ap. 14	Ap. 14	Ap. 14	Ap. 17	—	Ap. 2	Ap. 7	Ap. 17	Mr. 27
Ap. 6	Ap. 14	Ap. 14	Ap. 26	Ap. 17	Ap. 24	Ap. 6	Ap. 9	Ap. 17	Mr. 27
Ap. 5	Ap. 27	Ap. 6	Mr. 28	Ap. 7	Ap. 18	Ap. 16	Ap. 4	Ap. 14	Ap. 1
Ap. 19	Ap. 22	Ap. 17	Ap. 15	Ap. 15	Ap. 17	Ap. 11	Ap. 16	Ap. 20	Mr. 30
—	—	—	Ap. 24	Ap. 21	Ap. 12	—	—	Ap. 28	Ap. 19
Ap. 30	My. 12	My. 4	Ap. 25	Ap. 30	Ap. 30	Ap. 18	My. 12	Ap. 28	Ap. 23
My. 30	Jn. 4	My. 24	My. 26	My. 25	My. 19	—	—	My. 24	My. 18
—	—	Jn. 1	My. 26	Jn. 17	Jy. 2	—	My. 23	—	Jn. 1
Ap. 19	Ap. 28	Ap. 22	Ap. 23	Ap. 21	Ap. 24	—	Ap. 23	Ap. 24	Ap. 22
My. 11	My. 26	My. 26	My. 29	My. 21	My. 26	My. 21	My. 27	My. 12	My. 13
Ap. 26	—	Ap. 24	Ap. 22	Ap. 21	Ap. 23	—	My. 6	Ap. 28	—
My. 4	My. 18	My. 1	My. 2	My. 9	My. 19	My. 17	Ap. 29	My. 6	My. 3
—	—	My. 26	My. 21	My. 18	Jn. 10	—	—	Ap. 28	—
Mr. 27	Ap. 14	Mr. 24	Mr. 30	Mr. 25	Ap. 3	Mr. 28	Mr. 24	Mr. 17	Mr. 21
n. 1	My. 18	My. 16	My. 7	My. 7	Jn. 3	—	My. 7	My. 16	My. 14
n. 1	—	My. 24	My. 27	My. 27	—	My. 23	My. 29	—	My. 24
My. 14	My. 16	My. 7	My. 22	My. 19	—	My. 23	My. 29	My. 15	—
—	—	My. 21	—	Jn. 2	My. 30	—	—	—	—
y. 3	—	—	—	—	—	—	—	—	My. 25
y. 11	My. 16	My. 16	My. 25	My. 19	—	—	My. 26	My. 26	My. 13
p. 26	My. 11	Ap. 24	Ap. 28	Ap. 24	My. 5	—	—	My. 7	My. 6
—	—	—	—	My. 18	Jn. 28	—	—	—	—
—	—	—	—	—	My. 17	—	—	—	Jn. 1
p. 14	Ap. 22	Ap. 15	Ap. 14	Ap. 14	—	Ap. 25	—	Ap. 20	Mr. 26
y. 25	Jn. 3	My. 24	My. 17	My. 19	Jy. 3	My. 24	My. 27	My. 24	My. 24
y. 16	My. 26	—	—	My. 19	My. 22	—	—	My. 12	—
y. 22	My. 26	My. 24	Jn. 3	My. 19	Jn. 1	—	Jn. 3	My. 26	My. 18
r. 31	Ap. 21	Ap. 8	Mr. 28	Mr. 27	Ap. 14	Mr. 27	Mr. 30	Mr. 27	Ap. 3
. 4	My. 16	My. 14	My. 7	My. 12	Mr. 17	—	—	My. 11	My. 5
y. 6	My. 12	My. 13	—	My. 13	My. 16	My. 1	My. 14	Ap. 28	My. 6
y. 3	My. 5	Ap. 27	Ap. 30	Ap. 25	My. 3	—	—	My. 5	My. 1

Birds of the Isle of Bays, 1957

By FRED W. LAHRMAN, Saskatchewan Museum of Natural History

For many years an island on Old Wives Lake known as the Isle of Bays has been of considerable interest to the Saskatchewan Museum and several museums outside the province. Motion pictures have been taken of the rich bird life, specimens have been collected, and bird banding operations have been conducted by the United States Fish and Wildlife Service. In 1953 naturalist Hugh Halliday visited the Island with Fred G. Bard and myself and vividly described the island for thousands of readers of the **Toronto Star Weekly.**



Old Wives Lake lies 20 miles southwest of Moose Jaw. It is approximately 17 miles from north to south and 18 miles from east to west. It is a shallow lake being at present no more than 9 to 10 feet in depth between the island and the north shore. The island is approximately 2¼ miles from shore at the closest point. Owing to its isolation the island forms a natural sanctuary for an abundant bird life. Because of the winds and huge waves which spring up so quickly it can be a dangerous trip to the island if one is not careful. During the time of Hugh Halliday's visit we had to wait on shore for three days for the wind to go down before it was possible to venture out to the island.

During the period from June 6 to July 20, 1957, several visits to the the island were made by Dr. Robert Nero, Bruce Shier and myself to study the behavior of the Western Grebe, species which has been nesting here in a dry-land situation, and to colle faunal material for the Museum. We made five trips to the Island and we on it for a total of 18 days. During this period I had the opportunity to obta the following information on the birds which poulate or visit the island.

As soon as one arrives on this island one is impressed by the large nu bers of gulls and terns which rise in a screaming flock—a noise which nev ceases day or night—and by the swarms of midges, which rise in clou and almost smother anyone who attempts to walk through the buckbrus rose briar and nettle which cover the island.

The most spectacular of the breeding birds are the Pelicans. We estimat more than 1,000 nests. In the midst of this colony about 350 Double-crest Cormorant nests were found and on the edge of the colony on the southe tip of the island, three Great Blue Heron nests were found. Other bi observed on or near the island follow:

Western Grebe — approximately 1,000 Grebes visible on the water fr island at times. 250 nests.

Horned Grebe	several	none breeding on isla
Eared Grebe	2	none breeding on isla
Pied-billed Grebe	1	none breeding on isla

Black-crowned Night Heron — up to 50 or more could be seen at one time. They would fly back and forth to the mainland where they were nesting.

Canada Goose	36	no nests found
Lesser Canada Goose	1	no nests found
Mallard Duck	plentiful	several nests and young
Black Duck	4	no nests found
	(1 hybrid Mallard-Black Duck)	
Gadwall	plentiful	Many nests and young
Baldpate	plentiful	Many nests and young
Pintail	plentiful	Many nests and young
Shoveller	2	no nests found
Blue-winged Teal	3	no nests found
Green-winged Teal	3	Birds with young
Redhead Duck	plentiful	Birds with young
Canvasback	plentiful	no nests found
Lesser Scaup	plentiful	no nests found
Ring-necked	a few seen	non-breeding
American Golden-eye	a few seen	no nests found
Ruddy Duck	plentiful	no nests found
Red-breasted Merganser	a few seen	non-breeding
Hooded Merganser	3	non-breeding
White-winged Scoter	a few seen	?
Buffle-head	2	?

Great rafts of ducks visit the island to go through their moult or "eclipse" period, and at times 5,000 or more could be seen resting on the sandy beaches and floating in the nearby bogs. Red-heads and Canvas-backs formed the majority of this group. The island provides ideal nesting requirements for the "tip-feeder" type of ducks especially and their nests were frequently found within 50 feet of each other indicating that there were hundreds of nests distributed over the island.

Marsh Hawk	1	would fly across from mainland daily
Coot	2	no nest found
Killdeer	2	no nest found
Willet	several	no nest found
Lesser Yellow-legs	several	
Greater Yellow-legs	several	
Knot	several	
Ruddy Turnstone	several	
Peep Sandpipers-Least	several	
Spotted Sandpiper	several	one nest found
Baird's Sandpiper	several	
Dowitcher	several	
Marbled Godwit	several	no nest found
Sanderling — 4 were found washed up on shore after a severe thunder storm.		
Avocet	several	no nest found
Wilson's Phalarope	several seen	nesting
Ring-billed Gull	estimated 2,000 nests	
California Gull	estimated 50 nests	
Franklin's Gull	visited island in large numbers	
Bonaparte's Gull	visited island in small numbers	
Common Tern	estimated 1,000 nests	
Eastern Kingbird	2 pair	nesting
Crow	1 pair	nesting
Yellow Warbler	plentiful	nesting
Brown Thrasher	one heard singing	
Red-winged Blackbird	approx 800 birds	nesting
Yellow-headed Blackbird	2 birds seen	no nest found
Cowbird	100 or more	heavy parasitism on the Redwing
Song Sparrow	plentiful	nesting
Clay-colored Sparrow	plentiful	nesting
Savannah Sparrow	several birds seen	probably nesting

BIR
THE ISL
Old Wives L

Pelican colony on
Isle of Bays,
Old Wives Lake, S

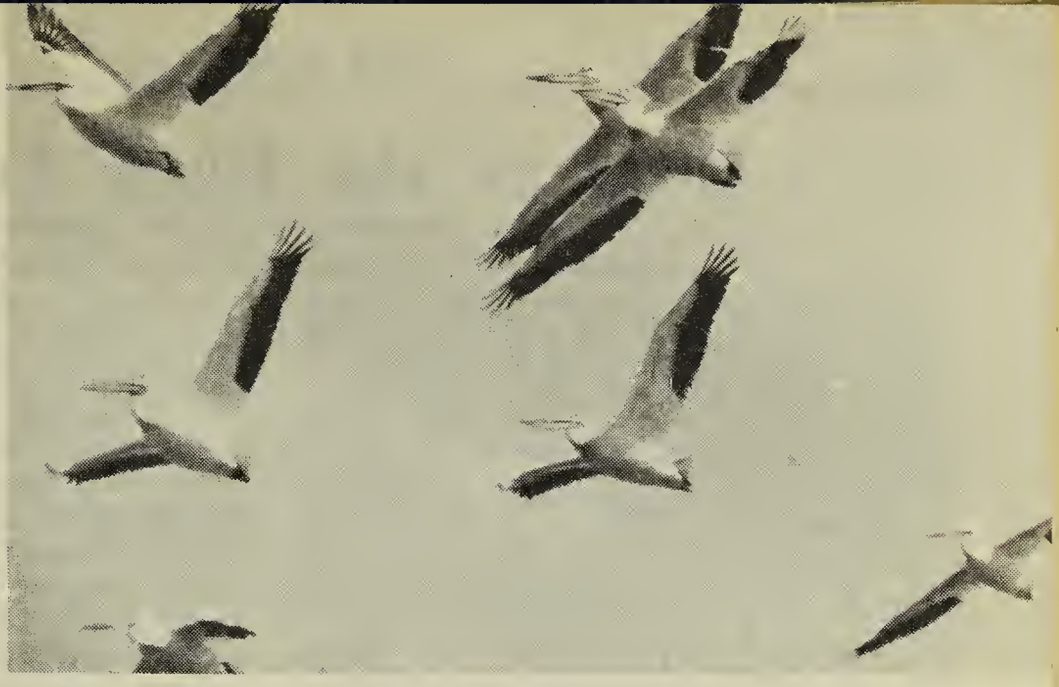
As one approaches the island, gulls and terns rise in screaming flocks.

Califo

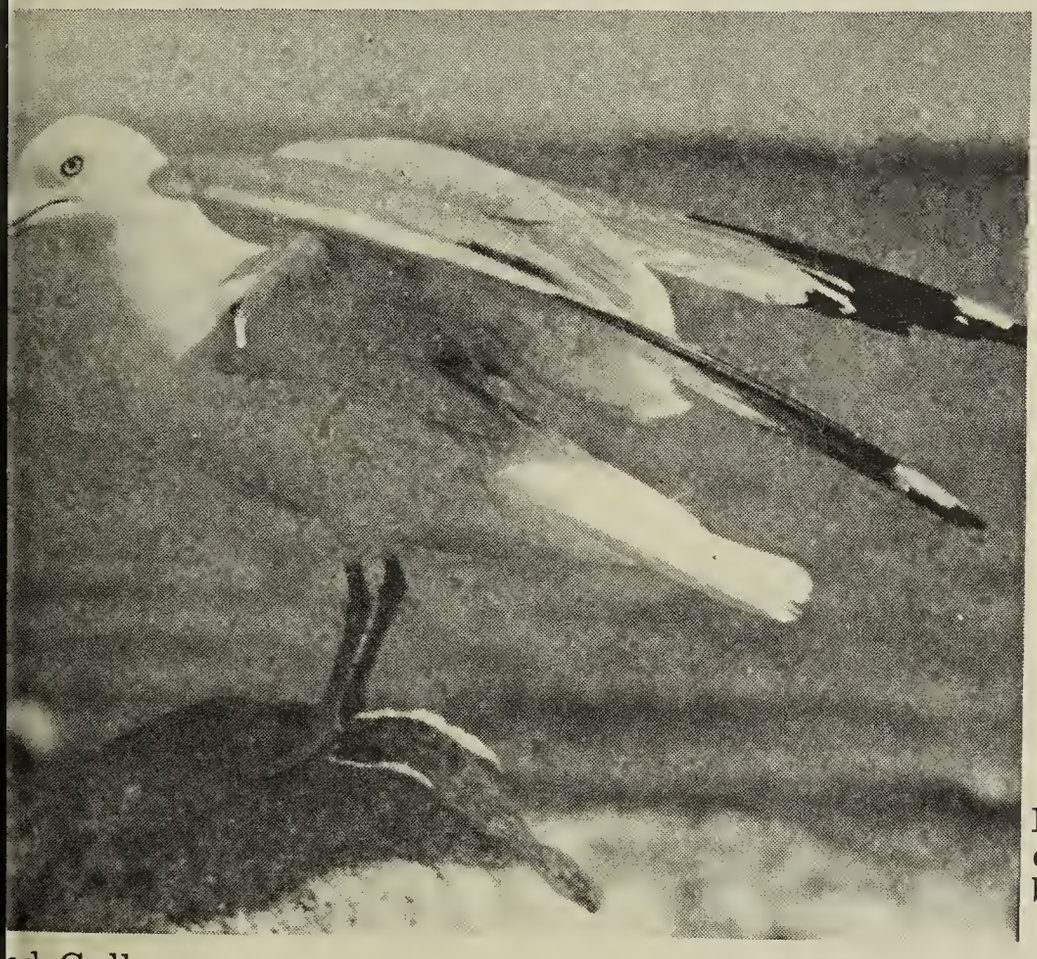
Great Blue Heron f
ing between its fish
grounds and the
breeding colony on
island.

BAYS

hewan



elicans in majestic ight over Old Wives Lake



ed Gull

Ring-billed and California Gulls are found breeding together on the island

reat Blue Herons usually nest in trees, but re is a typical nest the ground on the reeless Isle of Bays.

hrman

Dogs in the Duck Factory

By J. BERNARD GOLLOP, Saskatoon

Reprinted from *C. I. L. Oval*, Vol. 25. No. 5, October, 1956

Hunters who are enjoying this year's near-record crop of waterfowl may tender part of their thanks to some prairie-bred dogs who have played an important part in the joint Canadian-United States waterfowl management program . . . This year (1956), retrievers and spaniels were used in the banding programs of the Canadian Wildlife Service, co-operating with the U.S. Fish and Wildlife Service, provincial game branches, Ducks Unlimited, and the Wildlife Management Institute. Most of the dogs were used in special study areas spotted across the southern parts of the Prairie Provinces in the area which has become known to conservation people as the "duck factory."

Kindersley, Saskatchewan, is the site of one of these study areas. Here biologists of the Canadian Wildlife Service have been using dogs for the past four years. This year their partners were Rusty, a four-year-old Labrador-golden retriever cross; Widgeon, a Chesapeake Bay retriever, and Chips, a Labrador retriever pup.

The importance of the part the dogs play can best be understood by looking at the purposes of the special study areas. The first objective is for ground crews to determine, by census, the size of the breeding populations in May and June and the number of young produced in July and August . . . It is necessary to find out approximately what proportion of the ducks actually on the ground is recorded by the aircrews who conduct continent-wide surveys to determine waterfowl population trends and upon whose data hunting regulations for each year are largely based . . . The comparisons between the two figures assume, of course that the ground crews are getting accurate counts of the birds present. Without dogs, the men have always found it difficult enough to feel they were making a complete count even when they are "working" pairs of breeding ducks. With broods, the problem is greater because of the first sign of any disturbance mallard and pintail hens are liable to leave the water and head across country with their broods. If the dogs were not used to find and retrieve at least some of the members of these broods, they would go unrecorded.

The second objective of the ground study areas is to keep in close contact with ducks through the season, and to work on specific phases of the life history of one or several species. Dogs are a valuable asset, finding nests both by accidentally flushing the hens and by scenting them. Last spring at Kindersley, Widgeon found four mallard hens on their nests, thereby saving the crew the trouble of setting traps to catch and band them. The birds were first located by scent at distances up to 10 yards, and then either caught in the brush or picked out of the air.

It is in the banding of broods, however, both on the study areas and by roving crews, that dogs really come into their own. Since 1954, all the organizations banding in Canada have directed their efforts toward getting adequate samples of flightless young mallards. This species is the most abundant North American duck as well as the biggest contributor to the hunter's bag. In Canada, it is also the species causing most of the damage to the western farmer's swathed wheat and barley crops. But the type of banding done in the past, voluminous as it has been, has yielded little information about the relative importance of the routes taken and the wintering areas used by mallard populations from specific portions of the breeding ground. More of this information, as well as data on variations in shooting pressure from year to year, is still needed to bridge the gap between waterfowl surveys and hunting regulations.

At Kindersley, more than 3,000 flightless young mallards have been banded in the past four years by Canadian Wildlife Service crews using dogs like Rusty, Widgeon and Chips. Another 2,000 have been caught by herding or driving broods into traps. The dogs were used only on small sloughs containing fewer than half a dozen mallard broods; traps were used for larger numbers on areas large enough so that the mallards would condescend to remain while a trap was set up.

Most of this banding was done

n a block of agricultural land some 0 miles square, and it was accomp- shed by one crew in 1953, two in 954 and 1955, and three in 1956. he crews have consisted of one or wo men and a dog, although one an has sometimes handled two dogs. he daily catch has ranged from two 75 mallards per crew and has veraged 29.

To get a well-distributed sample f young mallards, just about every ough in the area has to be worked -whether or not the birds are seen n it. In many cases a mallard brood afing on the shore will turn around nd walk into the grass as soon as a ehicle stops or a banding crew ppears; such a brood is seldom oted until the dog starts retrieving ndividuals from it. On sloughs with o emergent vegetation, mallard roods on the water will usually head r shore if they feel that they can scape unnoted. If not they may ead for the deepest water, where ey have to be carefully herded shore either by wading or by canoe efore the dog can work effectively.

When on land the dog works the ear-shore cover on the first trip round the slough, and then the area p to 300 yards back from shore on e second coverage. As a dog ap- roaches a duck, his tailwagging eeds up until he is at close range; en he suddenly comes to an abrupt alt, tensely waiting a few seconds r his eyes to see or his ears to hear hat his nose tells him is there. He en pounces in the general area, cates the duck, works it out of ver and carries it to the nearest ander.

It might seem that when working ith these "upland waterfowl" the field men should be able to do their own duck catching, but this is not possible. One reason is that the birds usually rush into the thickest-cover bushes, grass or standing crops. Another reason is that they seldom stop near the water's edge, and within a matter of minutes may be scattered within a one-mile radius of the shore . . . And if the crew needs another excuse, they can only admit that they just don't have the nose for the job. The field books show that while each member of the two-man crew was finding one mallard, the the dog had found and caught eleven. When dogs learn to attach bands and keep the records, biologists will be out of the mallard-banding business.

While dogs work best on land, they are also efficient in shallow water. After a duck has dived three or four times, the dog is usually in a position where he can put his head under water and come up with the bird. In water deep enough so that the dog has to swim, he can still scent birds in dense aquatic vegetation, but here it is usually the handler rather than the dog who does the actual catching.

Training dogs for this work differs little from that required for field trails . . . Any retriever with a good nose, basic obedience training and at least a rough idea of hand signals should develop into a good duck banding dog **if** he has what a dog handler calls a "soft mouth" and **if** he is otherwise gentle with live birds.

As this season progresses down the flyways, hunting dogs from many of the 26 states visited by Kindersley-raised mallards will be retrieving banded birds that have once before been handled by one of three other dogs—Rusty, Widgeon or Chips.

1957 Summer Banding

by DR. STUART HOUSTON

My summer banding excursion esulted in a total of 1845 birds being nded, (about a thousand less than st year). These included 876 Ring- lled Gulls, 342 White Pelicans, 110 ommon Terns, 75 Double-crested ormorants, 73 California Gulls, and Franklin's Gulls. The latter were nded at Beaufield Marsh, south of errobert on June 25th, and the next day Frank Switzer and I took part in a drive of moulting ducks with Bernie Gollop's Canadian Wildlife Service crew aided by Tom Sterling's Ducks Unlimited air boat. A by-product of this drive was 24 adult and 34 immature Eared Grebes. Five moulting male Ring-necked Ducks were also banded.

Little Quill Lake showed a sur-

prising increase in the size of the Pelican colony. Last year 19 young Pelicans were raised there, and they were three weeks later than elsewhere, suggesting that this may have been a second attempt at nesting that year. This year over 300 Pelicans were hatched at this colony, and I banded 219 of them. It may well be that these are the same birds that once nested on Last Mountain Lake until discouraged by successive years of June flooding, and perhaps by the increasing number of fishermen's encampments at the northeast part of the lake. The Cormorant colony on Little Quill also increased in size, coincident with a sharp decrease in the numbers of this species on Last Mountain Lake.

The tiny island of nettles and rose bushes on Last Mountain which had 8 White-winged Scoter nests in 1955 (5 of the females caught and banded, see "Blue Jay", Vol. XIII, Oct. 1955, p. 28), and 5 Scoter nests in 1956 (4 females caught and banded), had 4 Scoter nests when visited this year. Two of the three females caught proved to have been banded on the same island the previous year.

Continuous high winds marred the visit to Redberry Lake, where 123 White Pelicans were banded at the only island (of four) that could be visited.

My small sample of hawk nests, while not large enough to allow of definite conclusions, nevertheless suggested poor success and this might be linked to the low numbers of ground squirrels in recent years. A Marsh Hawk at Dilke had only three young; the youngest of three Swainson Hawks at Dilke was dead at the foot of the tree; the three Red-tailed Hawk nest located near Saltcoats by Billy Horseman raised only one young each. Similarly a Horned Owl nest at Dilke had only one young.

Two Pigeon Hawks nesting in an old Magpie nest west of Regina Beach were banded on July 7. This nest had been found by Doug Gilroy, and independently by S. R. Belcher, J. B. Belcher and Margaret Belcher.

Crippled Owl Nesting

By RICHARD W. FYFE, Saskatchewan Museum of Natural History

On May 7, 1957, I found the nest site of a Great Horned Owl (*Bubo virginianus*) on the ground near an abandoned salt mine south of Merid, Saskatchewan. The nest was within 30 yards of vacated mine buildings and machinery in an area of prairie entirely devoid of trees, the closest being more than a mile away. One of the parents and two young owls were found at the site which was a slight depression with no nest material (see photo). The scraped ground of the nest site measured 23 by 17 inches. The partly-eaten remains of two immature jack rabbits lay to one side of the nest; about five feet from the nest I found a small fragment of a white egg-shell evidently from an owl egg.

As can readily be seen by the accompanying photograph the parent at the nest was very reluctant to move. Eventually it did retreat from the nest and proved to be frightless. It was caught and examination of the left wing disclosed an extensive injury to the radius and ulna which was almost completely healed. Scar tissue about one inch in length overlay the wound and deep red coloring surrounded the scar. There appeared to be no infection. Presumably the unusual selection of the nest site was the result of one parent being crippled. However a review of the literature indicates ground nesting does occur so this may have been the normal choice of these birds.

Although only one adult was seen at the nest the other parent must have been nearby as it seems unlikely that the crippled bird could have provided food for the young. Certainly the jack rabbits must have been provided by another bird.

Protection of Hawks and Eagles

By Morris Jackson Reprinted from the *Victoria Naturalist*

To furnish adequate rather than paper protection to hawks and eagles whom must we convince that such protection is necessary or justifiable? . . . who comprise the hawk's present-day human enemies; with whom does the conservationist have to contend? There is the ammunition salesman who urges us to "kill that pest", with his company's ammunition of course. I fear we can do little there. There is the poultryman, a very minor threat in himself where hawks are not actually preying on his stock. He is far too busy to go looking for hawks, and yet he has plenty of sympathisers to take up his cudgels and kill an osprey or black vulture (I have had both these birds described to me as a "great big hen-hawk".)

There is the youth, idle when school is out, who, whatever he may have learned there, has learned nothing of his debt to nature, of his kinship to creation. He wanders aimlessly, shooting with his .22 at any acceptable living target, and songbirds are "acceptable" — they eat cherries and damage gardens, though not his garden—he knows nothing of gardens. If he shoots a hawk he glows with civic pride. The law encourages him in this. Hawks kill birds. How many are there of these lads? Outside of the towns, they are legion. They have licenses, and if questioned are "hunting crows". It is true that they are required to be accompanied by an adult when shooting but they seldom are, and the adult is too often simply a youth over 18 years. How can we talk of hawk conservation to a killer of songbirds?

The adult sportsman is most unlikely to be a hawk conservationist. He usually subscribes to at least one magazine which relies on its sporting goods advertisements. To such magazines every predator is "a killer" which must be put to death in the the interest of game conservation . . . how often have we heard (these sportsmen) talk of a bird they have seen as a "great big hawk, or it may have been an eagle". Surely. Or a black vulture or heron . . . most certainly none of them know one hawk from another. And unless I held it in my hand, for the most part neither do I. It is imperative therefore that protection should include all hawks; a law that excludes accipiters gives no protection to any. One of the points raised by the Game Commissioner when I wrote about the necessity of protecting bald eagles was that it is easy to confuse their young with those of the Golden Eagle. I feel that both species should be protected.

Do You Know the Hawks?

Photo by R. W. Fyfe

The young falcon in the picture is an immature male Richardson's Merlin. It was taken from a nest of four birds 17 miles west of Kindersley, Sask. on July 2, 1957. The young hawk is being raised by R. W. Fyfe, extension officer at the Museum, who wants to have people learn more about hawks and their role in nature. Perhaps hawks are the most misunderstood of all birds. In Saskatchewan at present five species of hawks are not protected—the Goshawk, Pigeon Hawk (of which the Richardson's Merlin is the western sub-species), Duck Hawk, Cooper's Hawk, Sharp-shinned Hawk. Two of these species, the Duck Hawk and the Pidgeon Hawk, have recently received protection in British Columbia although Goshawks, Cooper's Hawks and sharp-shinned Hawks are still not protected there. Should our society urge the full protection of birds of prey in Saskatchewan?

Problems in Raising Young Sandhill Cranes

By DAYTON O. HYDE, Yamsay Ranch, Chiloquin, Oregon

Four of the young which we raised on our ranch last year (1956) migrated in the fall, appearing on December 2 near Santa Rosa, California. There they were afraid of dogs as cranes would be in the wild, but they let people approach. This did not surprise us, as we had not tried to make them wary of people, since we were concerned merely with developing flight and intended to pinion the birds for the breeding flock. The four cranes were fed during the winter at an Air Base, which they left and returned to at will. Eventually they were trapped and taken to the Fleishacker Zoo in San Francisco. After eight months' absence from the ranch, they went wild with excitement when I appeared in the crowd at the zoo and gave them a low food call. I brought them home by auto where they immediately dashed for the spot where their parents spend most of their time.

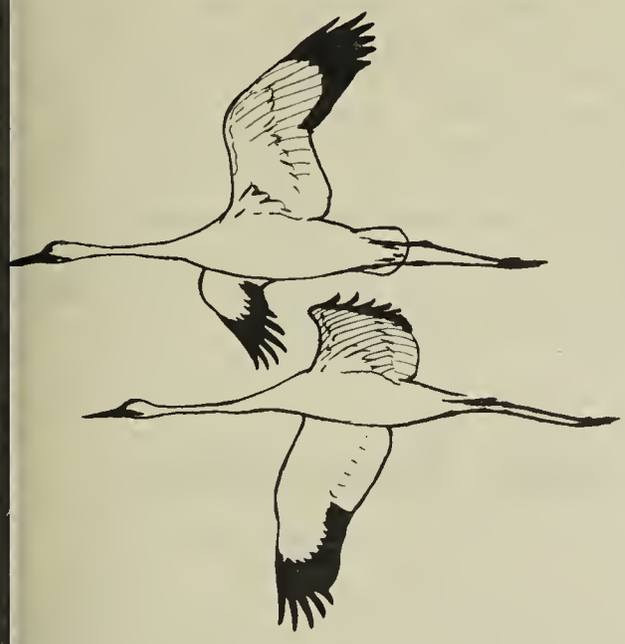
Obviously, any Whooping Crane management programme would fail if birds raised in captivity could not be returned to the wild. I am not worried any more about flight powers or ability to feed in the wild. I think that we have solved the problem of developing these. The real stickler is to raise young cranes so that they don't regard Man as a benefactor, so that they become truly wild. This year we raised two young without their ever seeing man—behind panels which gave them a one-way view over the meadows and marshes. We developed a method of feeding eliminating hand feeding, which I didn't dream was possible since even the wild parents feed the young with their beaks.

All went well until the third week, when the older and larger of the two turned on the other and almost killed him. After hours under a heat lamp, the younger crane regained consciousness, but it still shows the effects of the beating, having developed pneumonia. We are caring for it by hand and once more it is growing fast. Because this little crane remains as wild as any in the field, I suspect that, once the time of imprinting is past, it is hard to condition a young crane to regard Man as his benefactor as did my hand-raised cranes of last year. I hope to determine the exact length of time of imprinting. If we find this time to be only a short interval, it would simplify my programme and methods.

I have spent many hours in the field this year trying to determine just why the wild Sandhills usually raise only one young. In the Bly valley of southern Oregon I checked five pair with two young, one with one young. Two young ran with each pair from a week to a month, longer than my previous records. In a late survey by helicopter we found that none of the pairs had *more* than one young left, although all had one. This loss is difficult to explain in terms of predation. The pilots of two helicopters became very interested in our cranes and since they spent many days over the nesting areas, they checked every pair they found. I went with them on several flights and found their observations correct—only one chick with each pair.

When I have seen two young birds with a pair, the general pattern seems to be this, that the male takes one chick and the female the other, generally feeding from one to two hundred feet apart. If an alien crane intrudes, the male flies up and drives the intruder out of the territory. The chick leaves the male to go to its mother, but when the male comes back from his flight, the chick joins its father again. Perhaps this observation will prove of use if Whooping Cranes are raised in captivity. One chick might be removed and given to the second parent, without depriving them of sight contact with each other, at least during the daylight hours. Crane research is a slow, laborious process and there is still much to be learned.

GIVE THE WHOOPING CRANES *"SAFE PASSAGE"*



As the BLUE JAY goes to press at the beginning of the fall migration season, we again ask our readers to help give the Whooping Cranes "safe passage" on their way south to the Aransas National Wildlife Refuge.

Last April, 21 Whoopers left the Aransas Refuge in small groups and began the long flight north to their breeding grounds in Wood Buffalo National Park. Three birds remained on the refuge for the summer—one adult male which had spent the winter on the nearby King Ranch, and a pair of one or two-year-old birds. Upon the recommendation of the Whooping Crane Advisory Committee, the adult male was captured on July 2 as a possible mate for the captive female bird in the custody of the San Antonio Zoological Society. Unfortunately, this bird collapsed and died on the day of his capture.

Meanwhile, two young Whooping Cranes are being successfully raised in the New Orleans Zoo under the supervision of an aviculturist, George Scott, of the New York Zoological Society, and enccuraging reports are coming from the breeding grounds. Early in June, N. S. Novakowski, biologist with the Canadian Wildlife Service stationed at Fort Smith, N.W.T., sighted nine cranes in the Sass River area of Wood Buffalo National Park, five which appeared to be on nests. The last report available from Novakowski (July 15) recorded observations made during a a flight on July 12: two pair adults, both with one young of the year, one adult which appeared to be sitting on a nest, and one adult from the pair (with one young) seen July 5—i.e. indications of three young.

There were practically no reports of Whooping Cranes in Saskatchewan this spring, probably because bad weather in the south-central States delayed migration and made stopovers fewer. However, reports were later received of one bird (possibly two) spending the summer in Saskatchewan. The first crane reported was seen near Keystown on June 23 by Fred Lahrman of the Museum Staff, and again on June 24 by Lahrman and Rex Schmidt (U.S. Fish and Wildlife Service). According to local people, this crane had been in the area for approximately three weeks. It was not seen in the area when a check was made June 25. The second report came from Last Mountain Lake where a crane was seen on June 28 (at a distance of 350 feet) as it landed on a small island and rested for a few minutes before flying off again to the west (Dr. Stuart Houston, S. R. Belcher, Margaret Belcher). For almost a month after this date, reports of a lone crane in the same area (probably the bird observed by Houston) came from R. Blackwood, Conservation Officer, Imperial, and Arthur Perry, Nokomis (who observed the bird near the Perry farm on the lake west of Govan).

Speaking about the present status of the Whooping Crane, Fred Bard, Director of the Saskatchewan Museum and one of the twelve members of the Whooping Crane Advisory Committee, emphasized two important points. First, we must not, because of encouraging reports from the nesting grounds, relax our vigilance. Secondly, we should give immediate consideration to a management programme, since 50% of the potential hatch is lost on the breeding grounds with the cranes in the wild. Because he is strongly in favour of a management programme, Mr. Bard feels that the death of the crane captured last July was extremely unfort-

unate. We don't know fully the circumstances of the attempted capture, nor the cause of the bird's death, but this incident is greatly to be regretted since it will be pointed to eagerly by the critics of a management scheme.

For those people watching for Whooping Cranes in migration this fall, Mr. Bard gave the following pointers. Examine carefully the areas where Sandhills congregate for migration. During the critical first week or two in October, when Sandhills are migrating, keep binoculars handy and scan each migrating flock. Check and double check to be sure that any bird seen with Sandhills which seems white when reflecting light is *still* white when back-lighted. If Whooping Cranes are seen feeding in the stubble (and therefore likely to remain for two or three days), *telephone* report to the museum; otherwise, submit reports by letter. Finally, remember the Whooping Cranes are not likely to be seen in large flocks—groups are not usually larger than five or six.

Observations at a Garter Snake Hibernaculum

By ROBERT W. NERO, Saskatchewan Museum of Natural History

Occasional reports of large concentrations of snakes have been received by the Museum for many years but until now none of these sites has been examined. On April 29, 1957, Mr. Tom Gentles of Regina gave us a detailed description of a "snake hill" found by him on the previous day near Estevan, Saskatchewan. Since a trip to this vicinity had already been scheduled for other purposes, we were able to verify this report on the following day. Roy G. Young and LeRoy A. Faibish of the Department of Natural Resources, Fred G. Bard, and the author made up the party which visited the site. We arrived at the spot described by Mr. Gentles on the second terrace on the south side of the Souris River valley a few miles southeast of Estevan, at noon on a hot bright day. It was at once clear that our informant had not been exaggerating in his description of a mutitude of snakes. In an hour and a half we saw at least 500 snakes, all of which were apparently Red-sided Garter Snakes (*Thamnophis sirtalis parietalis*).

A small gulley about 100 feet long, 20 feet wide at the widest part and about 10 feet deep was the centre of attraction. This gulley was evidently the result of a cave-in over a burnt-out coal mine shaft. It was fairly open for the most part with a verticle exposure of burned or rather baked shale along the west slope at the upper end. This exposure appeared to be the actual den-site, the many vertical and horizontal crevices evidently offering ideal conditions for a hibernaculum. (Fig. 1) Snakes were numerous on the surface above the den-site and in the bushy area at the base of the gulley as well as in the actual gulley but only a few were found in other nearby pits and gullies. About 120 snakes were first located beneath a clump of snowberry (*Symphoricarpos sp.*). Many were on the ground in the shade of these bushes but others rested in the tops of the brush and these moved quite rapidly along on the branches. At two places beneath the bushes snakes were found in writhing masses of 30 or more each. It was noticed that when the snakes were disturbed they moved rapidly away but tended to return to their original locations. In places beneath the snowberry the leaves and twigs formed windrows around bare spots evidently the result of the sweeping movement of many snakes. This was particularly evident on the more sloping portions of the area.

On the ledge beneath the "cliff" a cluster of about 60 snakes was found (Fig. 2). During the 20 to 30 minutes of observation of this group others moved out from the cracks until about twice as many were present. In the bottom of the gulley at this point another mass was found containing at least 30 individuals. It soon became apparent that the members of each of the masses which we had under observation tended to stay together as they moved about following disturbance. Individuals which became separated quickly returned to the main mass. Furthermore, each of masses contained one large member

evidently a male, and it was this larger snake which seemed to hold the attention of the group of snakes. Most of the snakes were about two feet long, but one of the "leaders" was approximately three feet long. (the smallest snake found was a little less than 12 inches in length). As the larger snake in a group moved, other members followed rapidly, coiling about and clinging to the larger one. At times the larger snake appeared to attempt to free itself from the impending group by jerking and twisting and in one case a "leader" did move away from the rest of the group. This social behavior (whether it was sexual or aggressive was not determined) seemed to be the basis for the large masses. At one moment a portion of the mass on the ledge slithered downward; here again, several snakes clung closely to the larger one by wrapping themselves about its body (Fig. 3. 4).

On the slope of the hill adjacent to and above the shale ledge a great many snakes were seen with heads extending out of "gopher" holes; as many as 30 were counted in one hole. These quickly withdrew upon disturbance, seeming to go down into the recesses of the shale bed. Judging by the matted grass in this area a good deal of activity had taken place here. Similarly, many holes along the walls of the gulley and especially worn paths or slides leading to these holes indicated a considerable movement of snakes. The whole situation suggested that far more snakes were involved than we were able to count and that many had already dispersed or were still underground. Evidently the baked shale ledge with its many cracks and crevices has provided ideal winter hibernation quarters for this species of snake. According to a brief communication from Mr. E. Jenish, owner of the property, snakes have been seen in large numbers at this site in the spring and fall for a number of years.

Snakes and other reptiles commonly come together in large groups during hibernation and this is presumably the explanation for most of the reported "snake hills". Mr. Stuart Criddle of Treesbank, Manitoba, has described in detail observations of snakes found in an ant-hill (1937. Snakes from an ant hill. *Copeia*, 2:142). A total of 257 were found by him from one to three feet deep in the chambers of a large ant hill during September and October. Eight of these were Plains Garter Snakes, 101 were Red-bellied Snakes and 148 were smooth Green Snakes! Snakes have also been found hibernating in an ant hill in Michigan as well as in a crayfish burrow and a meadow vole tunnel, according to Charles C. Carpenter (1953. A study of hibernacula and hibernating associations of snakes and amphibians in Michigan. *Ecology*, 34:74-80.).

Dr. E. B. S. Logier has indicated that relatively little is known of the hibernating habits of reptiles. Here again local naturalists have an opportunity to contribute to our knowledge of the behavior of our fauna. Reports of den-sites need to be checked and a rewarding study awaits anyone who undertakes to

Photo by F. G. Bard

Fig. 1. Baked shale den-site. Note mass of snakes in the lower centre of photo outside main entrance of den-site.

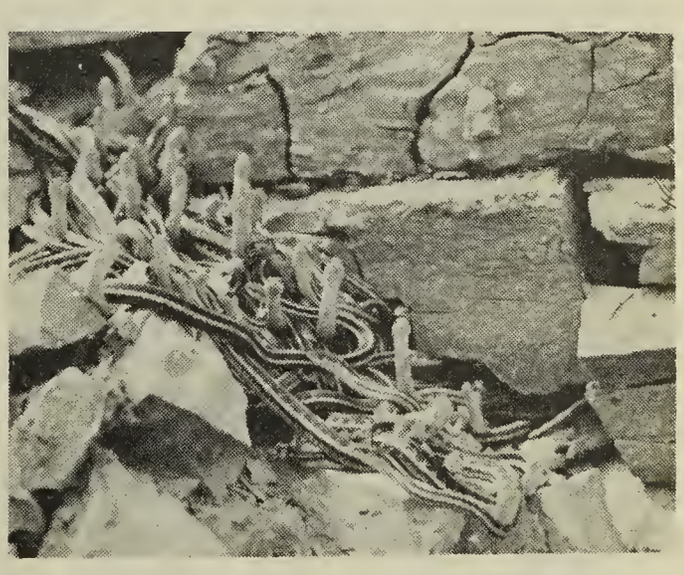


Photo by F. G. Bard

Fig. 2. Close-up of portion of mass of snakes in fig.1. At least 50 heads show.

understand the full meaning of the behavior which we observed in our short visit. Undoubtedly, the snakes at the Estevan site represent the population of a wide area, but only by locating marked individuals can we obtain any idea of the distance which these snakes move. Studies of social and individual behavior at the den-site should be especially interesting. It would be of considerable value to have a record of daily appearance and withdrawal, reaction to changes in daily weather, etc, during the period of emergence in the spring and prior to the final withdrawal in the fall.

EDITOR'S NOTE: Colored motion pictures of the snakes at the Estevan site were taken by Fred G. Bard and will provide one of the exciting events on the programme of the annual meeting of the S. N. H. S. at the Museum in October.

Photo by F. G. Bar

Fig. 3. Portion of the main group of snakes slithering downward followin movement of large snake.

Photo by F. G. Bar

Fig. 4. One large snake moving away with smaller individuals twinin about its body.

Records of the Horned Toad in Saskatchewan

By ROBERT W. NERO, Saskatchewan Museum of Natural History

Photo by F. W. Lahrman

A Horned Toad, or more properly Horned Lizard, recently received from Mrs. Don Gillespie of Rosefield, Sask., provides the second official record of a lizard in the province. A previously unreported specimen of Horned Toad in the National Museum was collected at Gergovia on August 22, 1931. The present record is from the same area. It was captured on June 1, 1957 near Rosefield (23, 1, 11, W23rd). Mrs. Gillespie wrote: "My sister and I went for a walk on June 1 and I just picked him up and put him in my pocket. They are found anywhere in the badlands where there are outcroppings of blue shale. I have seen a lot of them but never more than one at a time in one place. You see them mostly in dry years."

This information should help us find other specimens and thus extend our knowledge of the distribution of this interesting animal. We look forward to further reports from naturalists in that section of the province. The semi-desert conditions which are found in far southwestern Saskatchewan have long been presumed to provide conditions suitable to the occurrence of the Horned Lizard. Dr. E. B. S. Logier has pointed out that the distribution range drawn by H. M. Smith (1946. *Handbook of Lizards.* Comstock, New York) includes the extreme southwestern corner of Saskatchewan (pers. corres.). Logier and Toner state that it occurs in southwestern Alberta north to about 50 degrees latitude (1955. *Check-list of the Amphibians of Reptiles of Canada and Alaska.* Contrib. Royal Ont. Mus. Zool. Pal., No. 41). According to the same authors our lizard should be the Eastern Short-horned Toad (*Phrynosoma douglassi brevirostre* Girard). The identification of our specimen as such has been confirmed by Dr. Sherman Bleakney who also sent the information on the National Museum specimen.

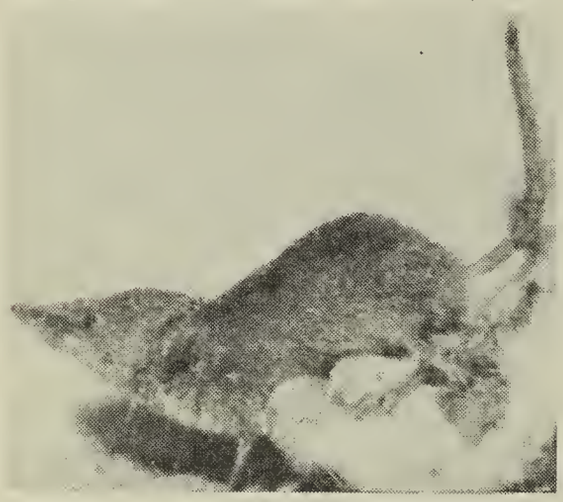
As shown by the photo our specimen is small, being a little over two and one half inches in total length. It was alive when received and was brownish-gray above, yellowish-white below. It was quite sluggish during the period we had it under observation, even when being photographed outside in the sun. However, as pointed out by several authors, this is a creature which likes very hot days, when it becomes quick and active. Its food, like most lizards consists mainly of insects. Unlike many lizards, the young of this group are born alive. Horned lizards are

generally supposed to be docile and have not been known to bite. According to G. C. Carl, however, when irritated they may open the mouth, hiss or inflate the body (1951. *Reptiles of British Columbia*).

Under extreme irritation they may even suddenly eject a thin stream of blood from the corner of an eye! This astounding feat has been well authenticated, and it amuses me to wonder whether it might have been the origin of the expression "mud in your eye"!

"Taming the Shrew"

By RICHARD W. FYFE, Saskatchewan Museum of Natural History



Common Shrew, natural size

The cover photo and those on this page are of a Common Shrew recently donated to the museum by some junior naturalists in Regina. The live animal is pictured here behind glass and feeding on a White-footed Mouse.

The Common Shrew is usually found in areas of brush or on the prairie near streams or other water areas. Seldom seen because of their small size, they are more common than we realize. Although they have a total length of from 3½ to 4 inches and a weight about that of a penny (3.6 gm.), they are noted for their fearlessness and will occasionally attack and kill mice much larger than themselves. However, the main diet of most shrews is insects which are more easily obtained. Having a very high metabolic rate with a heart beat of 1,600 beats a minute, they require a tremendous amount of food and are reported by some authors to eat up to three times their weight in food per day. They are admirably equipped to do so, because they have piercing teeth and because they can poison their prey with venom similar to that of a cobra. Although the Common Shrew is not considered very poisonous, one other member of the shrew family, the Short-tailed Shrew, can inject enough poison into humans to cause considerable pain for one or two weeks.

The Pygmy Shrew, which is the world's smallest mammal, is often confused with the Common Shrew shown here. This is very understandable as they are similar in appearance. Although the Pygmy Shrew is slightly smaller, it can only be distinguished by an examination of its tooth pattern. However, the Common Shrew is the one most often found in Saskatchewan. Questionable specimans should be sent to the museum for identification.

Common Shrew

Short-Tailed Shrew Records

By ROBERT W. NERO, Saskatchewan Museum of Natural History

Mrs. J. Hubbard of Grenfell, Saskatchewan, recently submitted to the Museum a Short-tailed Shrew (*Blarina brevicauda*) which was collected by her at Grenfell on June 19, 1957. This specimen provides an important verification of the occurrence of *Blarina* within the known range, Grenfell being the locality from which this shrew was first reported for the province although no specimen was then available (see *Blue Jay* 1956, vol. 14:45).

A Short-tailed Shrew (skin and skull) received from James Luthi, taxidermist and amateur naturalist, Punnichy, and taken by him from a cat in July, 1954 extends the range previously described. Since this record is 40 miles north of the Qu'Appelle River valley it adds further weight to the belief that this shrew occurs over a wider area than is now known. It would be of particular interest to obtain records from Watrous, Humboldt or Melfort since it seems likely that the range extends at least this far west. Somewhere in this general area one expects to find the limit of their range and this boundary has special ecological significance.

Another specimen brought in shortly before the *Blue Jay* went to press extends the known range of *Blarina* in Saskatchewan northward more than 37 miles. This shrew was found dead on July 23, 1957 in the yard of Bruce Smith of Connell Creek, eight miles northeast of Arborfield, Sask. and was brought to the museum by J. D. Smith of Regina. Presumably, it was caught and left in the yard by a cat, shrews generally seeming to be unpalatable.

A comparable record for Manitoba has just been published in the *Canadian Field-Naturalist* (vol. 71: 83) extending the range northward in Manitoba to The Pas.

New Silver-haired Bat Records

By ROBERT W. NERO, Saskatchewan Museum of Natural History

A few Saskatchewan Silver-haired Bats (*Lasionycterus noctivagans*) have already been received by the Museum this year. The first of these is of particular interest since it was taken nearly three weeks earlier in the season than any previous record (see BLUE JAY 1957, vol. 15:38-41, 86):

Specimen—May 13, 1957, Birmingham, in Pool elevator. Mrs. Steve Turchak. (Female, 2 embryos, crown-rump measurements—7 mm.).

Specimen—June 4, 1957, Kamsack, in School. Mrs. I. Podovinnikoff, Lindlen Valley School. (Female, 2 embryos, 9 mm.).

Specimen—June 10, 1957, Spirit Lake, on garage door. Miss Joyce Gunn. (Female, 2 embryos, 8 mm.).

These records suggest that the Silver-haired Bat occurs as a breeding species in the southern part of the province, as was indicated in a previous article. It seems unlikely that these pregnant females would still have been migrating; moreover, their appearance within buildings in June suggests attempts to find suitable nursery sites.

Photo by R. W. Fyfe

Live Silver-haired Bat in flight in Museum Board Room. Electronic-flash 1/1000 at f11.

BOYS' AND GIRLS' SECTION

Goldfinch on saskatoon branch

by Agnes Dobryden 16, Sanford, Man.

Barn Swallow

by Gregory Schulte, 14, Marysburg, Sask.

Blue Jay

by Dan Pawlivis 10, Square Hill, S

Comments and Prize Winners

The prize-winning letter this issue is by Sam Beckie who writes about spider eggs. Sam arouses our interest with his opening sentence and then goes on to tell us what can be found under first base. His own interest and curiosity led to his investigations; having a magnifying glass and reference books available helped him in making his observations. The result was a good story. Sam's teacher, Mrs. Doshen, receives a prize as well for sending in a prize winning entry from her school.

The drawing of a Pigeon Hawk by Herbert Hlady is the prize-winning drawing. Herbert has done a drawing which isn't labored or tight and yet he has captured the likeness of the bird and made it look alive. This is good observation plus good drawing.

We like having comments like Kathy Skinner's which are not intended for the contest but are good observations worth publishing "Saskatchewan Mice" is anothe contribution which wasn't entered i the contest but does make goo reading.

Parts of Linda's "Woodland Sym phony" are quite good, particularl where she tells about a "mysti woodland pool". Perhaps this poe could have been shortened to advan tage and Linda can keep this in min when writing again. Put everythin down, then go through it and se if parts of it are not quite as good a the rest. This is a good suggestio for story writers as well. Sometime the best writers are those who hav cut the most of their stories.

Several of the stories sent in we much too long for publication. Rem ember the 500 word limit and rem ember to keep to the topic. Mo important of all, keep sending i contributions and be sure to tell u about first-hand observations whic you yourself have made.

CONTEST RULES

1. Entries must be first-hand observations in the form of letters, stories, poems, black-and-white sketches, or photographs. Letters and stories should not exceed 500 words.

2. All entries must be accompanied by the name, age, and address of the sender, and the name of his or her school.

3. Entries should be addressed Boys' and Girls' Section, *Blue Ja* 2335 Athol St., Regina. The closi date for the next issue of the *Bl Jay* is October 15.

4. This contest is open to a young person.

5. Entries from students may sent in by the teacher or by the stu ents themselves.

6. Teachers who send in entries rom their pupils also qualify for a rize. One teacher will be chosen each time from among those who have sent in prize-winning entries from their pupils.

PRIZES: Prizes will be donated by the Saskatchewan Natural History Society. Three izes will be awarded to student entries each issue, provided they are of prize-winning standard. he prize-winners are to select their prize from the following list of books: The Peterson Field uide series (birds, butterflies, mammals. rocks and minerals, trees and shrubs, amphibians and ptiles, ferns, animal tracks), Budd's *Wild Plants of the Canadian Prairies, Photography for eenagers,* or a year's subscription to *Canadian Nature.*

Observations at a Beaver Dam

By MARGARET SCHICK, age 13, Lorlie, Sask.

One warm June afternoon our class ent out on a nature hike to the earby Pheasant Creek. We were to ook for examples of mammals, repiles, insects and other wildlife subects. On a roadside slough we saw uch ducks as the Blue-winged Teal, Pintail and Scaups all in neighourly company. Gulls darted nervusly over a weedy slough. A Iourning Dove cood plaintively as e neared its home.

We finally arrived at the beaver am. The beavers use mud and sticks o build it so strong that a person an walk over it. A good reservoir f water is held back to provide xcellent habitat for many birds and nimals. Large trees have been cut own, some quite recently to provide heir food. Unlike the rabbit who hews the bark off in a ring and eaves the tree to die, the beaver ses the whole tree, cutting it into horter lengths to store away for later se. There was a small shallow overow pool where the little fish were unning themselves on the rocks. We aught snails, bloodsuckers, a baby sh and other things. The Blue eron rose slowly into the air with long legs stretched out behind him. We heard a Red-winged Blackbird whistling from the top of a high tree. There was a catbird, canary and kingbird singing. In the distance we could hear a noise like a far away tractor starting up. We came to the conclusion that it was a prairie chicken drumming on his hollow log.

Further up the creek we saw another dam. Along the water's edge we found many strange water plants. Two snakes slid away in the grass.

About three o'clock we climbed a hill with our crayons and paper under our arms. In the next half hour we made an outline sketch of the scenery. It was hard to put the wonders of nature on paper. We were all sorry to leave for the school but we had enjoyed a full afternoon of nature.

NOTE: The "Canary" which Margaret refers to is more properly called a Goldfinch. Canaries are not native to this province. The "Prairie Chicken" drumming on a hollow log is more than likely a Ruffed Grouse so called because of the black feathers on either side of its breast which it spreads out when performing its mating dance. The true "Prairie Chicken" is extremely rare if not completely non-existent in this province.

More Squirrel Comments

By Kathy Skinner, age 14 Indian Head, Sask.

(see Kathy's story in the *Blue Jay,* March, 1957)

My family and I were very interested in your note, after my story. An interesting fact is that there were quirrels in this valley in 1882. When ny grandfather settled here, there were so many that they were considred pests, for they chewed the grainacks and binder canvases to line heir nests.

In the coulees during the winter, we often see mushrooms up in tree crotches, where the squirrels have stored them! Our squirrel is seen eating maple and ash seeds quite often. This time of year they eat buds and lick the sap off the bark.

Our little friend Squikker, whom I wrote about, is a female. We thought she was a he! Lately she has lost the bright red color of her coat, and it has become rather dull and shabby. The other day we noticed that there were six little buttons on her vest! Six little babies! We really hope that she brings them down to visit us later on!

Pigeon Hawk

(Sketch done from a captive bird)
by Herbert Hlady, 15, Churchbridge, Sask.

Saskatchewan Mice

By Carol Van Dyck, age 11, 519-3rd Street E., Saskatoon

(The following was written by Carol for a public speaking contest after she became interested in mice through a visit to the Saskatchewan Museum of Natural History.)

I would like to tell you something about little animals in Saskatchewan that no one ever talks about very much, and that's Saskatchewan's mice. First, I should tell you the difference between a rat and a mouse is mainly in the name because some little animals that are called rats are really only the size of mice.

There are seventeen different kinds of mice found in Saskatchewan and these are divided into four different types. There are two that carry their food in the pockets in their cheeks —these are the pocket mice and kangaroo rats.

Then there are eleven kinds of ordinary mice and rats such as: grasshopper mouse, deer mice, white-footed mouse, red-backed and ordinary meadow mouse, the lemming, the little upland, the pygmy and the one with the hardest name—the Phenacomys mouse. Then there are the muskrat and the woodrat. The two kinds of mice that jump are called the jumping mouse and the western jumping mouse. Saskatchewan also has two kinds of mice that really don't belong here but were brought in by settlers . . . they are the ordinary house mouse and the Norway rat.

One of the mice I think is the most interesting was found only two or three years ago in Saskatchewan and is called the kangaroo rat—and it really isn't either a kangaroo or a rat. This mouse is almost nine inches long, but most of that is tail. It has very long hind legs. It's easy to tell its footprints because the long tail leaves a trail between them as it hops along in the sand. The kangaroo rat has only been found in one place in Saskatchewan—in the sand hills south of Sceptre. It was first discovered by a man named Mr. Buscholl who lives there. He wrote the Saskatchewan Museum about these strange little animals and the museum men went out and captured some of them. They had to do this at night because the kangaroo rat comes out only at night. It digs its little holes in the side of sand banks and covers its door when it goes into sleep and has to dig its way out again every night. The best time to see one is at four o'clock in the morning in the summer because it is one of the two Saskatchewan mice that hibernates in the winter. The other is the jumping mouse.

The kangaroo rat lives on seeds and insects and it can go for weeks without any water. It carries its food in pockets in its cheeks, and is very shy.

There is one use for mice that most people don't think of, and that is of house pets. When Grant MacEwan who lives in Calgary, was out in a field one day about three years ago he found an ordinary little field mouse and took it home to his daughter, Heather. Heather called the mouse, Hillary, and he still lives with the MacEwans and is a very spoiled fat little mouse. His milk has to be sweetened with corn syrup and he especially likes fresh nuts and chocolate pudding, but will not eat cheese. When Mrs. MacEwan vacuums she has to be careful not to vacuum up Hillary. The only time the MacEwans have trouble with him is when they go on holidays because no one wants to look after their pet mouse. So the next time you see one of our little Saskatchewan mice, even a Phenacomys, don't scream . . . make him a dish of chocolate pudding instead and you might have a new little friend.

A WOODLAND SYMPHONY

By LINDA EDWARDS, age 13, Bladworth, Saskatchewan

Green mansions of majestic trees
Filtering the sun to fall
In quiet contentment
On a sleeping fawn.
All is so peaceful and quiet
That you verily seem to be
In a cathedral,
But were not woods like these
God's first temples?
The white-throated sparrow's song is
Not like a break in the silence
But like a hymn blending in.
A zephyr gently blows from a hidden
vale
Bringing the faint but lingering scent
of violets
To blend with that of spruce and
pine.
Near a mossy old log reclining in the
sun
Deceitfully b e a u t i f u l mushrooms
grow,
Brilliant oranges, reds and yellows
Some paling with age.
Now dim mysterious isles of pines
and firs
Give way to a more open stance
Where white birches, like graceful
maidens swaying in the breeze,
And whispering pretty secrets to the
bubbling brook
And where the soft-eyed doe doth
drink,
Ever watchful—
A calm and mystic woodland pool,
Cut by a leaping fish
That dives to under-water caverns,
And in his wake
A cool spray of water dampens green
carpets of velvet moss.
A water spider scurries by
And leaves the pool frowning as
though angered
At the impudence of this tiny crea-
ture.
A duck glides silently beneath the
overhanging willow
Who balances as a dainty lady on tip
toes to better see
The everchanging patterns cast on
the water, through the aspens.
And in the evening
Twilight creeps gently in
Covering all with his dusky mantle,
And through the pines
The evening sunset sheds
Its soft light on a hermit thrush
Pouring forth silver chords of sound
So wondrous that it cannot seem to
be a mere bird's song
But that of angels.
A grouse drums forth his song of love
And challenge,
While from the lake
A loon sends forth its awesome cry
To echo and re-echo
As the silver keeper of the night
Slips above the pines
And spreads its tranquil radiance
over all.
A spider spins her silken web
Unmindful of the exquisite, velvet-
winged moths that flutter by
Till the magic silver light of dawn
Awakens the thrush
And the warbler and the lark
To join in one spiraling song of joy
While the water-lily unfolds her
petals
And the butterfly spreads his wings
And the flowers all lift their dew-
studded heads
And it seems all the world joins in
and sings
This glorious movement of the never
ceasing and never the same
Woodland Symphony.

Spider Eggs

by Sam Beckie, age 11, Bladworth, Sask.

One day while playing ball I lifted up the first base and found under it a curious thing. There was a little tube made of grass, about an inch deep, and at the bottom was a spider, with what looked like a very small golf ball fastened to its stomach.

We took it into the school to inspect it under the magnifying glass. We split the sack and inside were tiny eggs. We later found in our reference books that there were only a few spiders like this. We found that certain spiders spin silken sacks in which they carry their eggs until they can shift for themselves.

We are not definite yet what kind of spider we found. Both the Hunting and Wolfe spiders carry their eggs in this manner.

CONSERVATION AND RECREATION

The Vanishing Parklands and Public Conscience

By RODERICK HAIG-BROWN

Photo by Doug Gilro

Cypress Hills Provincial Park with its unspoiled stands of white spruce

Reprinted, by kind permission of the author, from *Saturday Night*, May 14, 1955, as th third in the *Blue Jay's* series of conservation inserts. At this time of year, people are comin back from holidaying in the parks of Saskatchewan and other provinces, and the memory the pleasant summer meeting weekend at the Cypress Hills Provincial Park is still fresh in ou minds. It is a time to take stock and to assess what these parks mean to us. In Saskatchewa we are fortunate in having an active provincial parks development programme. Yet Mr. Hai Brown's injunction to us to be prepared to fight for preservation of our parks is timely. Whethe they are national or provincial parks, or simply the recreational and park areas of cities, ou parks—as Mr. Haig-Brown reminds us—are safe only when citizens man a picket line.

The people of North America spend a sixth of their national income on recreation. This may seem an admirable choice, a reprehensible choice, or downright silly; but it is a free choice, growing out of the type of civilization we have. It is a social fact, and a hard economic fact. It is also a fact with a future; there is every possible indication that recreational spending, of both time and money, will continue to increase and play a larger and larger part in the economic life of the country. But it is a fact that Canadian government, federal or provincial, has done very little to recognize or prepare for.

Recreational use of land is not necessarily very demanding; forest land, for instance, will produce a hundred annual crops of game an fish and other recreational valu while it is producing one crop timber. Agricultural land can yie much, not only to the hunter an picnicker, but to anyone with a kee love of the world about him, wheth he is a full-fledged naturalist simply a man who likes to drive h car slowly along the country roa

In these instances recreation is subsidiary but important use of th land. It must not interfere with tim ber crops or agricultural crops, b it is clearly to the benefit of th country as a whole to encourage th use within these limits. On provi cial or national forest lands the tot yield of the recreational resources fish, wildlife, lakes, scenery, and

—through the period of regrowth ay even exceed the value of the timate timber crop. . .

There are other areas where rec- ation is properly the paramount even the exclusive land use. These e the areas that we call parks, nat- nal, provincial or municipal, and hich we generally consider the aranteed recreational areas not ly for ourselves, but for future nadians.

This is a good time to take a long, rd look at the parks of Canada d their guaranteed future. Rapidly creasing population, increasing ealth and leisure, together with the miting monotony of many types of ctory work and enormous advances transportation, have multiplied the alue and importance of public park- nds since the war. Parks that were emote are suddenly close at hand; arks that were used by a few score f visitors ten years ago are now sed by tens and even hundreds of housands; parks which once seemed comfortable reserve against the istant day when the population ould need them, are already barely dequate to meet the demands upon hem.

his would be bad enough if we still ad all the parks. But exactly as population builds and parks become more necessary, so economic and industrial pressures increase and there is demand that parks be thrown open to exploitation. The struggle to protect parks never ends—it goes on, year in year out, all over the United States as the land-grabbers think up new techniques. In Canada, the public conscience has scarcely begun to stir itself—yet the encroachments of industry upon parks have already gone far and fast.

Most Canadians are inclined to feel pretty smug about the National Parks . . . they are good parks and perhaps fairly well protected, though Banff already has a hydro-electric development with the usual hideous dam and penstock and surge tower. But the National Parks are not even nearly enough to serve Canada . . . It is clear that the future of recreational land is only partly here. The rest of it, if it exists at all, must be in the provincial parks . . . Yet even these, and even if they were securely worked into the national system, would not be enough to take care of future needs, nor would they ensure Canadians of honest, unspoiled samples of all that their land once was.

And the provincial parks are not secure . . . Provincial parks can only

Photo by F. W. Lahrman

Party returning from S.N.H.S. field trip at Madge Lake, June 1956

Sask. Govt. Photo by Les Robinso

Spruce and aspen along the beach at Madge Lake where the flora and fauna of two zones overlap.

be as secure as the will and conscience of the provincial legislatures. And the will and conscience of the legislatures can only be as sound as the information and foresight of the individual legislators. At the present time provincial legislators are rarely well informed, because Canadians have not yet defined the philosophical base of their recreational assets, and because trained and qualified parks officials are seldom free to speak out plainly when industry threatens park land. And foresight is a difficult matter in times when developments move as swiftly as they do today.

A system of provincial parks probably should not be a rigid affair. It should aim first of all to set aside areas representative of the various features of the province. It should make sure that the protected areas are distributed so that major and minor parks are easily accessible to residents in any part of the province. It should guard jealously those parks already within the reach of major centres of population. But it need not rigidly exclude the possibility o any other type of use from all par lands. In some instances there ca be the give and take of multiple us provided always that the recreationa use is paramount.

The danger here is in the principl Once concede that parkland can b safely used for more than one pu pose and everyone with a convenie industry will jump in and grab o what he can. The protection must b in defining and stating the purpos of each and every park area, and i testing any proposed encroachme in terms of its effect on the par purpose. The question then is wh could be trusted to do the testin and deciding? The only people qua ified to do it at all are the parl administrators. Almost, inevitabl some of their decisions would be t narrow, and in any case there mu always be some appeal from pure administrative decision; so the matt would eventually return to the legi lature again, but at least the legi lature would be informed by th stated purpose of the park and h

unrestricted advice of the administrators. The position would be onger and better than it is today. ut there is, ultimately, no real tection for parks except in the ength of public feeling. So long as public turns and bows three times the direction of the nearest stock hange at every mention of "pross" or "industrial development", vincial legislatures can be depled upon to make bad decisions about parks, and even the federal government will bear watching. There will be hope of a comprehensive and secure parks system in Canada the first time a labor union votes to down tools because a project threatens a park, or the first time an aroused citizenry mans a picket line in defence of a park. Sooner or later both these things will happen. But in the meantime the parks are disappearing.

Sask. Govt. Photo by Ralph Vawter

Sloughs and swamps in farming areas provide a rich harvest for the hunter. Here "recreation is the subsidiary but important use of the land."

Ernest Thompson Seton

By E. H. M. KNOWLES, Regina

DITOR'S NOTE: The author of this e sketch knew Ernest Thompson Seton very . In fact, Seton's homestead was not far n Mr. Knowles' first home in Saskatchewan.

Ernest Thompson Seton, author, ist and naturalist, was born in uth Shields in the North of Engd near the Scottish border in the ar 1860, and came to Canada at an ly age with his large family. They tled in the vicinity of Toronto and m an early age it was apparent t young Seton had an aptitude for tching, was very observant and s very fond of nature.

He was not a robust child but ned strength in the "outdoors" and h it a self reliance which came experience. Early in life, on the vice from a friend he commenced ping a diary from which many tes were readily available for his oks.

One would say that he was restless and that his eyes were always in focus for distant things. His manner and voice were gentle and quiet. He was extremely courteous, wiry, well set up and tall. His movements were rapid yet deliberate, and in walking he set his foot straight in the manner of a bushman.

Seton spent much of his time in and around Carberry, Manitoba from whence he made his excursions into what became Saskatchewan. He came into this area for the purpose of filing on a homestead. Names such as Fort Ellice, the Assiniboine River, the Shell River, the Bog, Little Boggy and Big Boggy, Pelly and the Duck Mountains occur often in his notes. He located his homestead, built a shanty and filed on the land. The shanty was well known as Seton's Shanty for many years afterwards.

During this time he was busy writing and his stories began to ap-

pear in periodicals and in book form. His *Life Histories of Manitoba Mammals* was published by him as Naturalist for the Province. The writings were well received and he was able to purchase a nice estate near Greenwich, Conn., U.S.A. where he set up his collections of sketches, paintings, skins and photographs. From here he ranged over the continent, his travels including a long trip to Aylmer Lake north of the Peace River country. He also made another visit to Saskatchewan with respect to the conservation of the antelope and of wild life in general.

As a raconteur he was unexcelled and his lectures were always well attended. Perhaps one remembered most the personal enecdotes which he used to illustrate some natural la that he had learned or some gem information which he had collecte in his travels.

Some of his contemporaries e deavoured to say that he was mere a writer of nursery stories but t publication of his *Life Histories* si enced his critics and brought hi great acclaim.

Seton always called himself artist naturalist. As an artist received his training in England a France, as a naturalist his bas training in Canada. He never fail to mention how kind the west h been to him in material.

He died at Seton Village ne Santa Fe, on the last ramparts of t Rockies where the Buffalo wind w always blowing.

An Interesting and Beautiful Native Plant

By W. C. McCALLA, Calgary

On August 10th 1923 I was botanizing in the Lethbridge area, and in tramping up and down the steep slopes I saw a plant new to me. The large white flower buds, 2 inches long, caught the eye first, then, in strong contrast, the harsh foilage very rough to the touch and clinging to one's clothes quite readily. Several times during the day I came across this same species but saw no open flowers.

After an early dinner I went back and saw to my delight that the splended flowers were beginning to open showing the numerous yellow stamens. As I watched, the flowers continued to expand until some of them were 3¾ inches across. The light was failing and I wanted a close-up photograph of the flowers, one that would record in proper tone the yellow stamens, and in those days that meant using a filter thus lengthening the exposure—and the wind was blowing!

I selected and cut off a good flowering stem, put it into my collecting case and hurried to my hotel room. The flowers came out of the case in perfect condition. I placed the stem near the window with a grey card as a background, consulted the light meter, and gave an exposu of 2½ minutes, F16, Isos 2 filt Com. Ortho film. Such a long exp sure might make the eyebrows some of my readers go up now t fast panchromatic film and fl bulbs are common place. The companying illustration is reproduc from the photograph taken t evening.

I am writing of course of *Me zelia decapetala* (Pursh) Urban Gilg. Of its common names Even Star is most appropiate as the flow open only in the evening. From limited experience I cannot g exact times but they seem to start open about 6 p.m. and to close at p.m. or earlier.

As I have found them the pe are almost white with only a f suggestion of cream colour. In s of careful handling mine tur brown in the press.

A good description of this p is given in A. C. Budd's Flora of Canadian Prairies.

Gray's Manual, 8th edition, g its range as "N. W. Ia. to Sask. Alta., to Okla., Tex. and Nev." Canada it is found across the so ern part of the prairies but it is common.

Photo by W. C. McCalla

EVENING STAR

Mentzelia decapetala (Pursh) Urban and Gilg (⅗ nat. size)

Winston Mair to Speak at S.N.H.S. Annual Meeting

Winston Mair, Chief of the Canadian Wildlife Service, will be the gues speaker at the annual meeting of the S. N. H. S. to be held in the Saskat chewan Museum of Natural History, Regina, on October 18 and 19. Mr Mair will speak Saturday evening on "Conservation in Canada".

National Film Board Photo

Winston Mair was born and raised on a farm at North Battleford, and took an active part in the activities of the agricultural community there. When he returned from overseas service in 1946, he went to the University of British Columbia to take his M.A. degree in Zoology, with specialization in Wildlife Management. After working with the British Columbia Game Commission as Supervisor of Predator Control, and then on the Defence Research Board at Fort Churchill for a short period, Mair was called to Ottawa in 1952 as the Chief of the Wildlife Service.

Since Mr. Mair's appointment as Chief of the Wildlife Service, additional wildlife men have been added to the Service to carry out research programmes vital to the welfare of many species of wildlife. Biologists of the service, stationed throughout the various provinces of Canada, work closely with the United States Fish and Wildlife Service, provincial game personnel and Ducks Unlimited on waterfowl population studies and banding programmes.

A wildlife research project whic is being carried on again this year i Saskatchewan by the Service is des cribed on page 110 of the *Blue Ja* by J. Bernard Gollop, a Canadia Wildlife officer. Another example o their work is the co-operative surve of barren ground caribou inaugurate through the efforts of the Servic working closely with Northwe Territories, Saskatchewan and Ma itoba Game Administrations as we as the Department of Indian Affair Agencies interested in wildlife re ources have been drawn into a clo working unit by leadership provide by Mr. Mair since his appointme as Chief of the Service.

PROGRAM

Evening Session, Friday, Oct. 18 the Museum—executive meeting 8:00 p.m.; social get-to-gether which all members are invited, 9:30 p.m.

Morning and Afternoon Session Saturday, Oct. 19 at the Museum registration at 9:00 a.m.; busine and programme sessions at 9:30 a. and 1:30 p.m.

Evening Session, Saturday, Oct. at the Museum—address by Winst Mair at 8:00 p.m.

NOMINATIONS AND RESOLUTIONS

Send suggestions for the nomin ations and resolutions committee to the Corresponding Secretary Margaret Belcher, Regina College Regina before October 5, 1957 Write the secretary also for fur ther programme details.

KODACHROMES

A limited time will be availab for members' items. If you ha kodachromes, bring ten to show this time; if you have other items interest, bring them for display du ing the sessions.

LETTERS

ue Jay Cover

I enjoyed very much the cover of e last issue of the *Blue Jay*. The aftsmanship is exquisite. Wish he s teaching art some place.—Dora rdal, Wynyard.

mmer Meeting

Photo by Joyce Gunn

rd-watchers identifying Red Cross-lls at Cypress Hills, June 15, 1957

I shall send my Cypress pictures ong for you and Mrs. Ledingham see. You will no doubt know most the people in the group pictures . I enjoyed meeting you and others no had previously been only names the *Blue Jay*.—Joyce Gunn, Spirit ake, Sask.

lthough Cypress Hills Park for June and 16 was the central point those ates were the only must. Before d after we were free to come or as the spirit moved. When tired driving, we (Mr. Dutton, Gilbert ains, and I) could pitch the tent, d fry the bacon and eggs . . . for even interest-packed days and over 00 miles of highways and byways . an enjoyable evening with Earl enderson of Boissevain and his col-ction of polished rocks. West then Regina . . . an hour at the splendid useum . . . a delightful visit at the red Robinson home . . . Though it as raining when we reached Mort-ch . . . we could not pass without call on "Casey" Jones . . . At Swift urrent . . . R. Caldwell of "Ducks nlimited" . . . talk stone collections. The park was reached in rain . . . ept in car. Up early in the morning . . the sun was shining . . . Just be-ind us was Ralph Steuck's trailer, nd beyond, the little open car from racken had pulled in during the night well plastered with mud. That first morning . . . we loafed with others of similar inclination . . . Sunday morning we risked the trip to Fort Walsh . . . Returning east . . . Shepherd ranch at West Plains . . . Eastend . . . Riverhurst . . . where we visited Fred Hill's private museum, then on to Saskatoon. Mr. John Shadick . . . has constructed a home-made lapidary outfit, and is doing very nice cutting and polishing of stones with it. Heading east towards home we called on a fellow collector at Clair . . . south to Fort Qu'Appelle . . . Abernethy . . . home.—Watson Crossley, Grandview, Man.

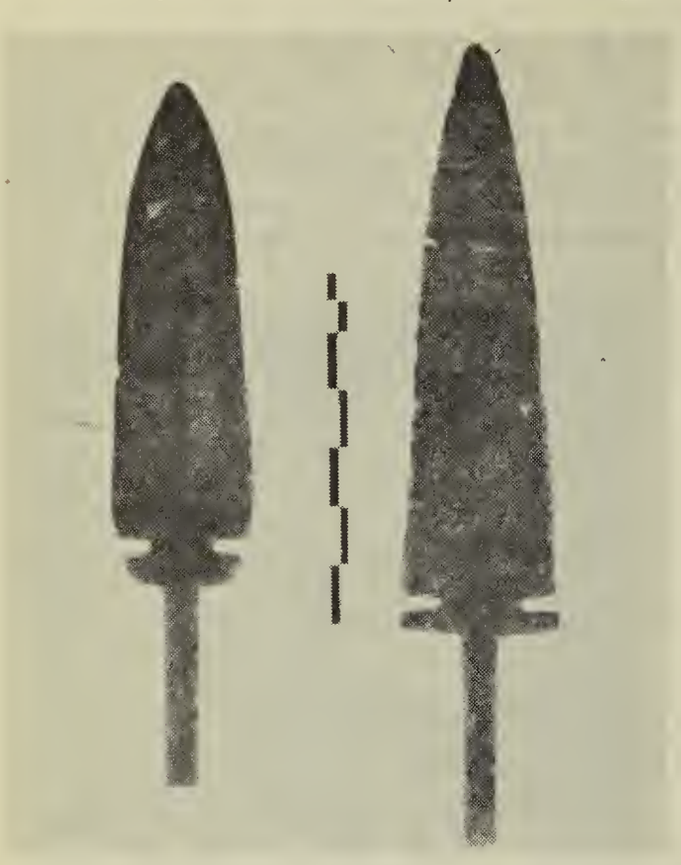
Musical Proclivities of the Crow

I have just been reading the June *Blue Jay* with Frank Brazier's inquiry about the Crow's song . . . I have heard this song twice, and a Magpie's song once. The Magpie doesn't sing very loud, and you have to be pretty close to hear it. I was in the tractor shed one morning when one sat on a granary close by and sang. It took me a minute to realize what was singing, as the song sounded like a low warble.—Jack Ward, Welwyn, Sask.

It was an April morning, warm and sunny. Little rivulets ran from melting drifts behind the barn. Chickadees "chickadeed" with an added lilt and a Blue Jay in the pussy willows practised assiduously the mellow notes of his repertoire. Two Crows sat silently in the thick branches of a spruce. Presently a new note mingled in the Chickadee-Blue Jay medley. It was a low soft "coo" "coo", repeated at intervals with the second syllable longer and one tone higher. It had a liquid quality like the lower notes of a flute, and was pleasing withal. For long I listened and watched for some new visiting artist, for although the sound seemed to becoming from the spruce, I just couldn't credit *Corvus brachyrhynchos* with the performance. Yet he it was who gave it and later, as the pair strutted about on the ground, he assayed several encores!—J. H. Grant, Harlan, Sask.

The Steel Trade Blade

By H. K. CRONK, Secretary, Saskatoon Archaeological Society



The blades in the photograph were used as trade goods by the early white traders in the West. Though their age is "recent" when compared to the stone blades found on the Prairies, I feel that it is permissible to think of them as being of archaeological interest. These blades are still being found while cultivating and some readers of the *Blue Jay* may have one or more in their possession, but few know anything of their origin. The Saskatoon Archaeological Society wishes to pass on to those readers some definite information on these blades.

Through the "trade marks" on the tangs, the Director of the Sheffield Museum has traced the manufacturers and the dates when their marks were registered. The longer blade, which is 13½ inches and 2¾ inches at the widest part, bears the mark of John Sorby and the Sons of Sheffield, which is "I S". The letter "I" was used in place of "J". This mark was used by this firm until 1827. In that year another son joined the firm and the trade mark was changed to "I & H SORBY". This is the mark on the shorter blade. This blade is 12¼ inches long, with a greatest width of 2½ inches. Since 1827 many changes have occurred in the company, but the mark is still being used by the present owners. A blade bearing this mark could hav been made any time between 182 and the time when the traders lo their sway.

It is possible that the mark was n impressed on all blades at the tim of making, as a blade of identic shape to the "I S" blade is in th Western Development Museur Saskatoon, without a mark. Anothe possibility is that those without th mark are copies made by othe makers in England or in other cou tries, as was the case wi the "Northwest Gun" — a gu originally made for the Hudson Bay Company in England, b copied for rival traders by firm in France, in Belgium and eve in the eastern part of the U.S.. *American Antiquity* Vol. XIX, No. shows a drawing of a blade found the campus of the North Idaho Juni College in 1949 by constructi workers who accidentally found a Indian grave. The shape is that the "I S" blade, but I have be unsuccessful in ascertaining t presence of a trade mark. I ha a drawing of a blade whi is the "I S" shape only eig inches long, found near Nipawi Again I have been unable to verify trade mark. The Luxton Museum Banff is the owner of a "I & SORBY" blade. This was found em bedded in a buffalo skull on Seve teen Mile Flat, west of Banff. I F. G. Roe, writing in the *Alberta Hi torical Review,* stated "that this is t farthest western point at which bu falo vestiges have been found in t Bow River Valley". The Curator the Hudson's Bay Historical Museu Winnipeg, has advised: "They appe to have been used as spear hea and war club blades and daggers the Indians and as snow knives the Eskimo." It would be interesti to know the trading value of the blades, but the "Bay" has no reco The Sheffield Museum which kindly searched the records for bo the Society and for Dr. Roe, has blade in their collection, but wou like to have one. If any reader of t *Blue Jay* would like to donate o or both of these blades to Sheffie the Saskatoon Archaeological Socie will be pleased to forward it to t proper authorities.

YOU WERE ASKING?

Question: (1) Miss Bradshaw's **wo Determined Tree Swallows** on age 81 of the June **Blue Jay** was ost interesting. Each spring tree vallows investigate all wren boxes n my place. They never stay, per-aps because the holes are too small the room size unsuitable. What nd of boxes should I put up to tract tree swallows?

(2) What is the proper way to get sults from an Audubon Bird Call? he method I use attracts only cats, tbirds and small fry of the human mily. — E. W. V. B., Tisdale.

Answer: (1) The U.S. Fish and ildlife Service Conservation bulle-n No. 14, **Homes for Birds,** gives the llowing dimensions for nesting xes for Tree Swallows: Floor of vity: 5x5; Depth of Cavity: 6; En-ance above floor: 1-5; Diameter of ntrance: 1½; Height above ground -15 feet. Acording to the bulletin, ree Swallows may be induced to rsake their natural nesting places old woodpecker holes by the ection of nest boxes in suitable ots, and boxes of almost any type ill answer very well when con-ructed to the proper dimensions. A dead tree is an excellent site for ch nests, and a number of boxes ay be nailed to the same stub. odies of water hold a great attrac-on for swallows, and even a small ol in which they can bathe by pping in flight will greatly assist efforts toward establishing a lony in artificial homes." **Homes r Birds** is available from the Super-tendent of Documents, U.S. Govt. rinting Office, Washington 25, D.C. r 15 cents.

(2) We have not had much success ther, with the Audubon bird call. hen using it for winter birding in e park here, we did not even ttract cats and children! — M.B.

Question: The article on butter-ies and moths in the June **Blue ay** aroused my interest. However, am more interested in collecting eetles, flies, spiders, etc. Could you ive me any help or suggest any ooks on collecting insects? — R. I. Sedgewick, Alta.

Answer: You may find these books elpful:

Field Book of Insects. 1948. Frank E. Lutz. Putnam, New York. $4.00
Covers methods of collecting and preserving, identification, natural history, etc. Includes chapter on spiders.

How to Know the Insects. 1947. H. E. Jaques. W. C. Brown, Dubuque, Iowa. About $3.00. Generally briefer.

How to Know the Spiders. 1953. B. J. Kaston. W. C. Brown, Dubuque, Iowa
Incidentally, we are anxious to obtain all possible specimens of spiders for Dr. H. Levi, assistant curator arachnida, Museum of Comp. Zoology, Harvard. Each specimen should have data — place, date, habitat. Information on occurrence and distribution in Sask. practically nil. — R. W. N.

Questions: (1) Is there a small species of bush rabbit? Years ago I used to ramble up and down the Carrot River, near which I live. In certain years there were many ordinary bush rabbits in the thick bush there, and there was also another rabbit — much smaller — which turned white in winter. I thought at first they might be young ones, but when I repeatedly saw their tracks and occasionally a live rabbit, I began to think they must be a different species. I found them only along the river, except once when there were tracks up the hill to my place. Sometimes, I thought the tracks were squirrel tracks. Are they a different species or just stunted bush rabbits?

(2) Has anyone seen a meeting of jack rabbits? Years ago (1925?), on a little field two miles west of Ridgedale, in the late afternoon of a late winter's day, I saw about 80 or more jack rabbits sitting in a circle about 50 yards in diameter. For the most part, they sat quite still facing the centre of the circle, but occasionally one or two would run into the middle and dance around like lambs. When one retired, another would take his place. Outside the circle there were one or two sentinels sitting up very straight and tall. The centre of the circle was not much more than 100 yards from the road and the rabbits did not seem the least disturbed by passers-by. What was the meeting for? And how did they get word around to each

other to meet at a certain place at a certain time? Jack rabbits were rather scarce then and they must have collected every rabbit from several square miles. — C. O. A., Ridgedale, Sask.

Answer (1) The small white rabbits described do not fit any species known to occur in the area. There is a diferent race of "bush rabbit" known as the Minnesota Snowshoe Rabbit found in the far southeast, but this is not any smaller than our more common American Varying Hare. Cottontail Rabbits occur in the southern part of the province but of course these do not turn white in winter. There are many areas of the province where our knowledge of the fauna is limited, and it will be necessary to collect and study a great many specimens to understand the distribution and occurrence of Saskatchewan mammals. Only a study of a series of skins and skulls of the rabbits in the Carrot River region can answer this query. — R. W. N.

(2) Seton records the mating behaviour of Jackrabbits (Game Animals and the Lives They Live series, reissued 1953, vol. 4:740) in this way: "...saw 12 or 15 together in one group, evidently a mating assembly for picking their partners." Probably little else is known of this behaviour, because it is seldom observed. Frequently, important observations are made by chance and by untrained persons. The need to make detailed notes at the moment of observation or shortly after is obvious. Publication of records of this sort helps further our understanding of nature. — R. W. N.

Question: Can you tell me something about the unusual stone hammer in the snapshot that I am sending you? I found it in a plowed field near Kelvington, half buried in the soil. It is of dark-grey granite, composed mostly of basalt and quartz with tiny specks of mica through it. It is 7¼ inches long, 3¼ inches in diameter at the broad end and ½x¼ inches across the rounded point. I have shown it to quite a number of people and they all say that it is the first one of that shape that they have ever seen. — J. J. A., Kelvington, Sask.

Answer: This is certainly a rare stone hammer. The pointed type with a flat opposing end is considered to be a dual purpose specimen — the pointed end for offense and the flat end for pounding pemmican. There are other types of stone hammers, the most plentiful being rounded at both ends for use in splitting large bones to obtain marrow. All Indian stone hammers are quickly recognized by the grooved ring around the centre of the stone. This groove was used for binding a handle to the hammer. — F.S.R.

Question: In this picture of some pieces from my collection of about 800 pieces including points, awls, scrapers, hoes, two axes, pounders, knives and skinners, all found on the Beaver Creek site, is the one on the extreme right a Scottsbluff point? I find the second from the right interesting, too, because of its curved blade, and the one in the centre because of the double notches. The one on the left is shaped like a Folsom, but doesn't have the groove running down the side. The little one is resting on a one-cent coin.
— J. W., Welwyn, Sask.

Answer: It would be interesting to see the points pictured here, but one hesitates to try to identify them from the photograph. Perhaps Mr. Ward will be able to bring some pieces of his collection to the Annual Meeting. — F.S.R.

Question: Are the watery blisters sometimes found on rabbits cysts produced by tapeworms? I have always associated these blisters with the so-called "ten-year plague" which results in very high mortality among our hares. But now it strikes me as strange that the presence of

e tapeworm in its embryo stage can e so lethal to its temporary host. the mortality in fact due to the peworm or to some other cause? H. M. R., Ituna.

Answer: The watery blisters are robably cysts of the dog tapeworm (**Cysticercus pisiformis**). These blisrs or white shiny bladers which re found among the intestines or nbedded in the liver, are the larvae the tapeworm. Rabbits may pick p the eggs of the tapeworm, on egetation which has been contamated by the feces of dogs or coyotes fected with the tapeworms. The ggs hatch into tiny larvae in the gestive tract of the rabbit. The ny larvae then make their way rough the walls of the intestine nd remain in the resting state which recognized as the "blister". To complete the life cycle of the tapeworm the raw flesh of the rabbit containing the cysts must be eaten by a member of the dog family. The larvae then develop into adult tapeworms in the intestine of the dog, eggs are produced and the cycle begins again. In contrast to the intermediate host the terminal host (e.g. dog, coyote) will likely become thin and unthrifty. Treatment can be given to dogs to rid them of these parasites.

Although it is commonly believed that the "blisters" in rabbits are responsible for "crash" declines in rabbit populations, this parasite has little or no effect on their mortality. Other diseases or parasites may affect rabbits, however. Tularemia, Rocky Mountain Spotted Fever, tick-induced anemia, "shock disease", may contribute to an increased mortality rate in rabbit populations. — T.A.H.

S.N.H.S. CHRISTMAS CARDS

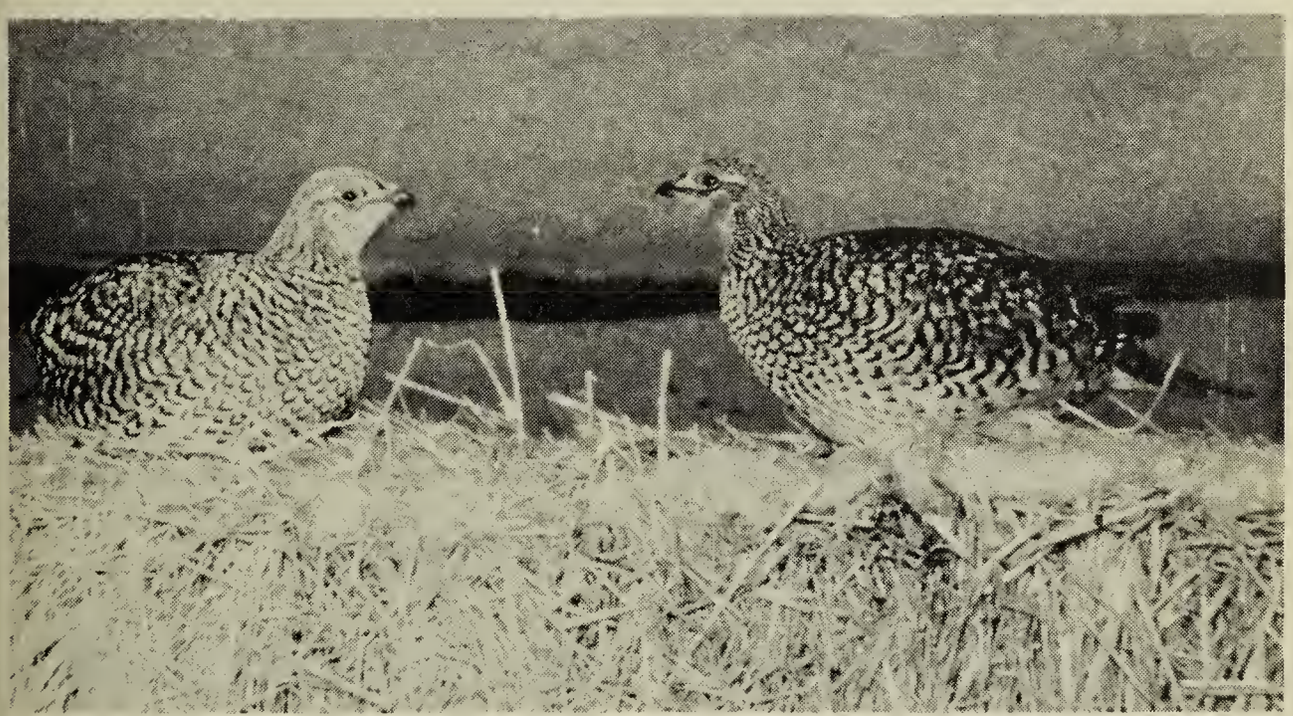


Photo by Doug Gilroy

A coloured reproduction of this dachrome photo of Sharp-tailed rouse, by Doug Gilroy, is being sed this year for S.N.H.S. Christmas ards. The card will be about 4"x5" ard of the folder type. Price: $1.25 er dozen.

We expect the cards to be available in time for the Annual Meeting.

They may be obtained from the following persons:

P. Pawluck, 163 Peaker Avenue, Yorkton, Sask.

Mrs. John Gerrard, 809 Colony Street, Saskatoon, Sask.

Mrs. John Hubbard, Grenfell, Sask.

Frank Burrill, Indian Head, Sask.

Margaret Belcher, Secretary, *Blue Jay*, Regina College, Regina, Sask.

Report of Summer Meeting at Cypress Hills, June 15-16 '57

By MARGARET BELCHER, Corresponding Secretary

The third summer meeting of the Saskatchewan Natural History Society, held at the Cypress Hills on June 15 and 16, had a larger attendance than either of the two previous meetings. Over 100 registered from 34 points in Saskatchewan, Alberta, Manitoba, Ontario, South Dakota and California.

Field trips were the main feature of the programme of the two days' meet. They included:

(1) Saturday morning excursion on foot, led by S. A. Mann, to familiarize the group with the Park, with comment on the flora of the Park by A. C. Budd, B. De Vries, and G. F. Ledingham.

(2) Saturday afternoon excursion by car to the Lookout and Bald Butte. This replaced the scheduled trip to the West Block cancelled because of rain and bad roads. One party, travelling by jeep with the Conservation Officer, did get to the West Block on Sunday to see the Trumpeter Swans, and we have Frank Roy's account of the expedition.

(3) Sunday morning birding trip by car to Cypress Lake.

An evening programme was held Saturday at Camp Shagabec. Members were welcomed by the President, Frank Brazier, and by the Editor, G. F. Ledingham. Dr. Ledingham introduced Herman F. Chapman, former editor of the *South Dakota Bird Notes* who had come with his wife from Sioux Falls, S. D., to attend our meeting. Bruce McCorquodale of the Museum gave an illustrated talk on the fossil mammals of the Cypress Hills, Ralph Stueck of Abernethy showed coloured film, and recordings of bird calls were played. After the programme, lunch was served in the camp hall.

Special thanks are due the local members who worked with the programme convener, Dr. R. W. Nero, to make the meet a success. Mr. and Mrs. Mann of Skull Creek, with their neighbours and friends, played host to the visitors, assisted with arrangements for the programme, and planned the social evening and lunch at Camp Shagabec. George MacMillan of Maple Creek assisted Mr. Mann in organizing the excursions.

Leadership for the birding excursion to Cypress Lake was provided by Dr. H. Jenner of Fort San and F. G. Bard and R. W. Nero of the Museum to whom the society also wishes to express its appreciation.

Finally, we want to thank the United Church at Maple Creek for the use of Camp Shagabec, and Mr. C. S. Kerr at the Park for his untiring efforts in providing pleasant accommodation for our large group.

Operation Trumpeter

By FRANK ROY, Saskatoon

Our trip by Land-Rover to the West Block on Sunday, June 16, was indeed a thrilling one—the roads were next door to impossible; we had to be pulled out once by tractor—but what a pleasure to find the Trumpeters!

Bottley's Lake is an insignificant prairie lake with grassy shores and a marsh at the south end. It lies just at the eastern edge of the west block of the Cypress Hills which rise abruptly at this point to an elevation of well over 4,000 feet. We stopped at a rancher's place to determine which lake the Trumpeters were frequenting at the moment, since we were aware of the fact that the remove to Adam's Lake every summer when the cygnets are old enough to stand the walk. They told us that they were still at Bottley, and that they had five young.

When they reached the lake, the two old birds were in full view, and trailing them were seven young—checked carefully with our 20x telescope. They were across the lake from us, and we never did get very close to them. One other adult had remained on the lake this year, and it followed us as we drove to the north end of the lake. So the total count was 10, three adults and seven

ung. Richard Zapf was as pleased we were, and says that this is the st time that more than two adults ve been noted at the lake. Dr. rnett took a number of pictures th his 400mm telephoto lens, al- ough we doubt that in any of these ll one be able to pick out all seven the young. For purposes of the ord, the observers were Dr. H. rnett, Dr. R. Bremner, Bob Pravda, chard Zapf (Conservation Officer), d myself.

Other records of almost equal in- rest from Bottley's Lake include 10 ult Canada Geese accompanied by downy young—these at the north- n end of the lake; three Red-necked rbe (one of them sitting on a nest the west shore of the lake), not eviously recorded from the Cypress lls area; and two pairs of Ring- cked Ducks which Godfrey does t list in his publication.

st of Birds Recorded at the mmer Meeting in the Cypress ills, June 15-16, 1957

The following birds were recorded the observers at the summer meet- g of the Saskatchewan Natural story Society in the Cypress Hills une 15-16, 1957). Observers rec- ded birds seen as they travelled m Maple Creek into the Park and trips to Cypress Lake and Bot- y's Lake as well as in the Park it- f. The area covered, however, was t as extensive as the area included W. Earl Godfrey's *Birds of the press Hills and Flotten Lake Re- ons, Saskatchewan* (*Ottawa,* 1950). rds not listed by Godfrey for the press Hills region are printed in lics.

As pointed out by Godfrey, the in- rest of the area for birders lies in e variety of ecological communities d in the affinity of the bird fauna the higher parts of the area with at of the Rocky Mountains. Such pically western species as the right's Flycatcher, Rocky Moun- n Orange-crowned Warbler, Red ossbill, Audubon's Warbler, and nk-sided Junco occur in the press Hills; whereas Canada Jays, ruce Grouse and Brown-capped ickadees, so common in the coni- ous forests of central and northern skatchewan, do not occur here at

Birds recorded (i.e. seen or heard by one more observer):
Red-necked Grebe, Horned Grebe, Eared Grebe, Western Grebe, White Pelican, Great Blue Heron, American Bittern, *Trumpeter Swan*, Canada Goose, Mallard, Gadwall, Baldpate, Pintail, Shoveller, Blue-winged Teal, Redhead, Ring-necked Duck, Lesser Scaup, American Merganser, Cooper's Hawk, Red-tailed Hawk, Swainson's Hawk, Ferruginous Hawk, Marsh Hawk, Pigeon Hawk, Sharp-tailed Grouse, Sage Grouse, Sora Rail, Coot, Killdeer, Wilson's Snipe, Long-billed Curlew, Willet, Spotted Sandpiper, Pectoral Sandpiper, Marbled Godwit, Wilson's Phalarope, California Gull, Ring-billed Gull, Franklin's Gull, Common Tern, Black Tern, Mourning Dove, Horned Owl, Long-eared Owl, Nighthawk, Belted Kingfisher, Yellow-shafted Flicker, Red-shafted Flicker, Hairy Woodpecker, Downy Woodpecker, Eastern Kingbird, Arkansas Kingbird, Wright's Flycatcher, Horned Lark, Bank Swallow, Rough-winged Swallow, Barn Swallow, Cliff Swallow, American Magpie, Crow, Black-capped Chickadee, Red-breasted Nuthatch, House Wren, Catbird, Brown Thrasher, Robin, Olive-backed Thrush, Wilson's Thrush, Mountain Bluebird, Sprague's Pipit, Cedar Waxwing, Loggerhead Shrike, Starling, Orange-crowned Warbler, Yellow Warbler, Audubon's Warbler, Ovenbird, Macgillivray's Warbler, Yellow-throat, House Sparrow, Bobolink, Western Meadowlark, Yellow-headed Blackbird, Red-winged Blackbird, Brewer's Blackbird, Baltimore Oriole, Cowbird, Lazuli Bunting, Pine Siskin, Goldfinch, Red Crossbill, Spotted Towhee, Savannah Sparrow, Vesper Sparrow, Lark Sparrow, Pink-sided Junco, Chipping Sparrow, Clay-colored Sparrow, Song Sparrow, McCown's Longspur.

List of Persons Registered at the Cypress Hills Meeting

Joyce Gunn, W. Anaka, of Spirit Lake; K. E. Baines of Tisdale; Mrs. Lucille Jenkins of Assiniboia; J. B. Belcher of Dilke; Mr. and Mrs. E. Symons, Mrs. M. Shaw, Mrs. H. Phillips of Rocanville; Mr. and Mrs. Charles Prince, Bobby Barradell, Donna Barradell, Kenneth Thompson Keith Thompson, of Paradise Hill; Mr. and Mrs. G. C. Buchanan of Francis; R. P. Stueck of Abernethy; Mr. and Mrs. B. DeVries of Fort Qu'Appelle; Dr. H. D. Jenner, R. A. Nevard of Fort San; Mr. and Mrs. Fred Beveridge, Mr. and Mrs. G. MacMillan, Mr. and Mrs. L. I. Binkley of Maple Creek; Mr. and Mrs. S. A. Mann, R. Mann, Mrs. I. Bennetto of Skull Creek; Kate Shuard of Carnagh; Pat Long of Melfort; Mr. and Mrs. S. Jordheim of White Bear; M. O. Bakken, Mrs. Laura Wright of Bracken; L. Martinovsky, T. Martinovsky, Mr. and Mrs. F. Hermansky of Gerald; Mr. and Mrs. J. C. Nichol, J. McGladdery of Marsden; W. W. Graham of Lloydminster; Mr. and Mrs. G. R. Binkley of Shaunavon; Mr. and Mrs. A. C. Budd, Mr. and Mrs. J. R. Caldwell of Swift Current; Mr and Mrs. Howarth of Prince Albert; Mr. and Mrs. A. C. Ellis, Mrs. F. B. Taylor, Dr. E. K. Schue, U. E. Steele of Moose Jaw;

J. Shadick, Mr. and Mrs. J. D. Hogg, Betty Long, Helen Mann, F. Roy, R. Pravda, Dr. R Bremner, Mrs. M. Evans of Saskatoon; Mr. and Mrs. B. Knox, E. Good, W. Baker, Mr. and Mrs. L. McK. Robinson, Dr. Frances McGill, Mrs. J. C. Black, Mrs. R. Williams, Gertrude Murray, Thelma Brady, Mrs. M. Willers, Marguerite Robertson, F. G. Bard, B. C. Shier, B. McCorquodale, Joyce Dew, Helen Rempel, Frances McKay, Wolfram Niessen, Mr. and Mrs. R. W. Fyfe, Dr. and Mrs. R. W. Nero, Dr and Mrs. G. F. Ledingham, Mrs. E. Cruickshank, Dr. Lucy Murray, Mrs. G. Hodgins, Edna Colbeck, Kay Armstrong, Margaret Belcher, W. A. Silverthorn, Mr. and Mrs. D. Gilroy of Regina.

OUTSIDE SASKATCHEWAN:

Mr. and Mrs. L. H. Stokes of Winnipeg; W. Crossley, Grandview, Man T. Dutton, Gilbert Plains, Man.; Mr and Mrs. E. Robinson, Wawanesa Man.; L. M. Lohr, Erskine, Alta. Kathleen Hodges, A. Hodges, Calgary D. H. Barnett, Toronto; Mr. and Mrs Herman F. Chapman, Sioux Falls S. D.; S. A. Stueck of Ventura, Cal

S.N.H.S. SUMMER MEETING AT EMMA LAKE

The Saskatchewan Natural History Society has been invited by the Prince Albert Natural History Society to hold its 1958 summer meeting at Emma Lake.We are pleased to accept the invitation of the P. A. society, and we suggest that you plan *now* to be at Emma Lake next summer.

The BLUE JAY Bookshelf

Wild Plants of the Canadian Prairies

By A. C. Budd. Publication No. 983, Canada Department of Agriculture, Ottawa, 1957. $1.50.

This is a revision in more convenient format of the mimeographed publication "Wild Plants of the Farming and Ranching Areas of the Canadian Prairies," Ottawa, 1952. As such, it remains the only usable flora of the Canadian Prairies. Those of us who had to learn to recognize our plants from Rydberg's confusing and often misleading writings will know what a need it fills. It could be, even, that the author has not been quite ruthless enough in eliminating the Rydbergian phoney species — I notice a few left in *Aster,* for example.

The keys seem eminently workable. Some people have regretted the necessity for keys saying, "Why aren't there more pictures? The answer is that when over 120(species are to be described there is no escape from written keys. The author has taken pains, as he says, to keep the language as simple and non-technical as possible; but a certain amount of work is yet required from those who would use this book The utter novice would be well advised to begin by going over carefully the introductory material — the diagrams and descriptions of plant parts and the directions for using the keys. This explanatory text, once notes, has been enlarged and transferred to the front of the book in the new edition. Perhaps in the written text special mention might have been made of some plants which are hard to key out, e.g. a greenhorn could have quite a time trying to decide if members of the Ragweed subfamily have both calyx and corolla in the flowers.

The printing is clear and the line drawings (by the author) have a charming quality. There are 6(species shown in the drawings; that number should give the novice a foothold from which to study further. A hard cover might have been useful, considering the field usage many copies are destined for. — John H. Hudson, Regina.

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NOTICE TO MEMBERS

This is the new, enlarged BLUE JAY. Since it is much more expensive print a magazine of this size, we cannot afford to do so without an arged membership. Help us to get new members. A larger circulation uces the cost of the BLUE JAY proportionately. We send BLUE JAYS to ry province in Canada, to most of the states in the United States, to South erica, New Zealand, England and continental Europe. We should like to tinue to expand.

MEMBERSHIPS

All persons interested in any aspect of nature are invited to join the katchewan Natural History Society. Membership dues per calendar r are: Sustaining, $5.00; Regular, $1.00. The BLUE JAY is sent without rge to all members not in arrears for dues. Send your membership to treasurer, Elmer L. Fox, 1053 Gladmer Park, Regina, Sask., Canada.

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If your address changes, notify the Society immediately. Send your plete new address and your old one to the Treasurer, Elmer L. Fox, 3 Gladmer Park, Regina, Sask., Canada.

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